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(FILE 'HOME' ENTERED AT 15:08:24 ON 03 JAN 2008)

FILE 'CAPLUS, MEDLINE' ENTERED AT 15:08:40 ON 03 JAN 2008

L1	.	0	S	LACTOSE	(P)	ANTIBACTERIAL?	(P)	ANTIFUNGAL?	(P)	WEIGHT	%
L2		0	S	LACTOSE	(P)	ANTIBACTERIAL?	(P)	ANTIFUNGAL?	(P)	%	
L3		0	S	LACTOSE	(P)	ANTIBACTERIAL?	(P)	%			
L4		10	S	LACTOSE	(P)	ANTIBACTERIAL?	(P)	ANTIFUNGAL?			
L5		3	S	L4	AND	PH					

L2 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1018378 CAPLUS  
TITLE: Probiotic preparation for preventing and treating  
bacterial vaginosis, and its preparation method  
INVENTOR(S): Kang, Bai; Yuan, Jieli  
PATENT ASSIGNEE(S): Dalian Synbiotics Science and Technology Co., Ltd.,  
Peop. Rep. China  
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu  
CODEN: CNXXEV  
DOCUMENT TYPE: Patent  
LANGUAGE: Chinese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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CN 101028289	A	20070905	CN 2006-10045953	20060301

PRIORITY APPLN. INFO.: CN 2006-10045953 20060301

AB The inventive probiotic preparation for preventing and treating bacterial vaginosis is prepared from (by weight parts) Lactobacillus delbrueckii 5-15, Lactobacillus acidophilus 5-15, lactose 500-700, and stachyose 100-300. Its preparation method comprises (1) culturing Lactobacillus delbrueckii and Lactobacillus acidophilus by anaerobic fermentation respectively, separating the bacterial cells by centrifugation, mixing with the protective liquid for freeze-drying, and freeze-drying to obtain powders of Lactobacillus delbrueckii and powders of Lactobacillus acidophilus; and (2) mixing the powders with lactose and stachyose, and making into dosage forms such as capsule for oral administration and effervescent tablet for topical administration. The probiotic preparation can be used for improving dysbacteriosis in vagina.

L5 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1332559 CAPLUS  
DOCUMENT NUMBER: 144:156665  
TITLE: Manufacture and application of microbial agent  
INVENTOR(S): Cui, Yunlong  
PATENT ASSIGNEE(S): Qingdao Eastsea Pharmaceutical Co., Ltd., Peop. Rep.  
China; Beijing Dongfang Baixin Biotechnology Co., Ltd.  
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 19 pp.  
CODEN: CNXXEV  
DOCUMENT TYPE: Patent  
LANGUAGE: Chinese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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CN 1663573	A	20050907	CN 2004-10006125	20040304
PRIORITY APPLN. INFO.:			CN 2004-10006125	20040304

AB The title microbial agent comprises Bifidobacterium, Lactobacillus, Bacillus coagulans, or/and Clostridium butyricum, fermented supernatant, oligosaccharides, polysaccharides, and traditional Chinese medicine exts. The agent can be made into various forms including oral liqs., aerosols, lotions, capsules, tablets, powders, and suppositories. The agent can be used to treat and prevent acute or chronic diarrhea and constipation, bacterial vaginosis and infectious vaginitis.

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1332559 CAPLUS  
DOCUMENT NUMBER: 144:156665  
TITLE: Manufacture and application of microbial agent  
INVENTOR(S): Cui, Yunlong  
PATENT ASSIGNEE(S): Qingdao Eastsea Pharmaceutical Co., Ltd., Peop. Rep.  
China; Beijing Dongfang Baixin Biotechnology Co., Ltd.  
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 19 pp.  
CODEN: CNXXEV  
DOCUMENT TYPE: Patent  
LANGUAGE: Chinese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	---	-----	-----
CN 1663573	A	20050907	CN 2004-10006125	20040304
PRIORITY APPLN. INFO.:			CN 2004-10006125	20040304

AB The title microbial agent comprises Bifidobacterium, Lactobacillus, Bacillus coagulans, or/and Clostridium butyricum, fermented supernatant, oligosaccharides, polysaccharides, and traditional Chinese medicine exts. The agent can be made into various forms including oral liqs., aerosols, lotions, capsules, tablets, powders, and suppositories. The agent can be used to treat and prevent acute or chronic diarrhea and constipation, bacterial vaginosis and infectious vaginitis.

L8 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:1124653 CAPLUS

DOCUMENT NUMBER: 142:33047

TITLE: Use of a saccharide for the treatment of  
symptoms associated with bacterial  
vaginosis

INVENTOR(S): Hansen, Inge Dorthe

PATENT ASSIGNEE(S): IDH Holding ApS, Den.

SOURCE: PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004110461	A1	20041223	WO 2004-DK410	20040611
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
EP 1635847	A1	20060322	EP 2004-736632	20040611
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK			
BR 2004011429	A	20060725	BR 2004-11429	20040611
US 2006154874	A1	20060713	US 2006-560519	20060320
PRIORITY APPLN. INFO.:			DK 2003-885	A 20030613
			WO 2004-DK410	W 20040611

AB The invention discloses the use of a saccharide, e.g. lactose, for the preparation of a medicament for the treatment and/or prophylaxis of one or more symptoms caused by bacterial vaginosis, wherein the medicament comprises at least 20 percent by weight of saccharide, and wherein the medicament is substantially free from bacteria. Furthermore, the invention discloses a method for treating one or more symptoms associated with bacterial vaginosis, as well as a pharmaceutical composition comprising the saccharide.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:232904 CAPLUS  
DOCUMENT NUMBER: 138:363091  
TITLE: Prenatal lipopolysaccharide alters postnatal dopamine  
in the laboratory rat  
AUTHOR(S): Ling, Zaodung; Gayle, Dave A.; Lipton, Jack W.;  
Carvey, Paul M.  
CORPORATE SOURCE: Departments of Pharmacology and Neurological Sciences,  
Rush-Presbyterian-St. Luke's Medical Center, Chicago,  
IL, 60612, USA  
SOURCE: Advances in Behavioral Biology (2002),  
53(Catecholamine Research), 209-212  
CODEN: ADBBBW; ISSN: 0099-6246  
PUBLISHER: Plenum Publishing Corp.  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The potential role of proinflammatory cytokines and dopamine in cell death  
was examined using Sprague-Dawley female rats at embryonic day 8 and  
injected i.p. with 10,000 units/kg lipopolysaccharide (LPS) at  
E10.5. Results demonstrate that prenatal exposure to a single dose of LPS  
led to a reduction of DA that lasted for 22 days. The increase in DA activity  
suggests that the nigro-striatal DA system was attempting to compensate  
for lost DA by increasing synthesis and release. Assessment for  
TNF- $\alpha$  and IL-1 $\beta$  revealed that the prenatal LPS increases production  
of proinflammatory cytokines and further, that the elevations of these  
cytokines may interfere with the development of the DA system. In addition,  
study of bacterial vaginosis (BV) in animal models  
revealed that BV can lead to elevations in prenatal LPS.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 8 OF 14 MEDLINE on STN

ACCESSION NUMBER: 2007762439 IN-PROCESS  
DOCUMENT NUMBER: PubMed ID: 18154460  
TITLE: Endotoxin-induced silencing of mesoderm induction and  
functional differentiation: role of HMGB1 in pluripotency  
and infection.  
AUTHOR: Sivasubramaniyan Kavitha; Atluri Rajesh Reddy; Sarda  
Kanchan; Arvind Milan; Balaji Vishnu; Deb Kaushik Dilip  
CORPORATE SOURCE: Manipal University, Embryonic Stem Cell and Developmental  
Biology Program, Manipal Institute of Regenerative  
Medicine, #10 Service Road, Domlur Layout, Bangalore  
560071, India.  
SOURCE: Regenerative medicine, (2008 Jan) Vol. 3, No. 1, pp. 23-31.  
Journal code: 101278116. E-ISSN: 1746-076X.  
PUB. COUNTRY: England: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: NONMEDLINE; IN-PROCESS; NONINDEXED; Priority Journals  
ENTRY DATE: Entered STN: 27 Dec 2007  
Last Updated on STN: 27 Dec 2007

AB OBJECTIVES: Mechanisms underpinning Gram-negative bacterial  
vaginosis-induced birth anomalies are obscure. Ethical issues  
limit such studies on peri-implantation-stage human embryos. Here we have  
used embryoid bodies (EBs) as an in vitro model to examine the effect of  
Gram-negative bacterial endotoxins/lipopolysaccharides  
(LPS) on the faithful induction of germ lineages during embryogenesis.  
The role of LPS-inducible cytokine and pluripotency-related DNA-binding  
protein HMGB1 was also studied in these EBs. METHODS: EBs derived from  
the human embryonic stem cell line HUES9 were exposed to 12.5 pg/ml of LPS  
for 48 h. The expression profile of the ectoderm, endoderm, mesoderm and  
trophectoderm lineage markers, such as beta III-tubulin, GATA4, BMP2,  
Brachury and beta-hCG, were studied, by RT-PCR and immunofluorescence.

Inhibition of mesoderm induction was confirmed by RT-PCR analysis for hANP, cTnT, ABCG2, GATA2, BMP4 and HAND1. Osteoblast differentiation was induced in the EBs, and confirmed by von Kosa and Alizarin red staining. A comet assay was also carried out to assess the degree of apoptosis in these EBs. RESULTS AND CONCLUSIONS: We found that the LPS-treated EBs were selectively silenced for mesoderm markers and failed to differentiate into functional osteoblasts. HMGB1 expression was absent in the normal EBs and was found to be localized in the cytoplasm of the LPS-treated EBs. Overall, our data indicate that endotoxin-induced HMGB1 expression in the peri-implantation-stage embryos can bring about severe birth defects of, for example, the bone and heart. This study also indicates that HMGB1 could be involved in maintenance of pluripotency in the human embryonic stem cells by impeding their differentiation.

L14 ANSWER 9 OF 14 MEDLINE on STN  
 ACCESSION NUMBER: 2005086186 MEDLINE  
 DOCUMENT NUMBER: PubMed ID: 15715588  
 TITLE: Role of cytokines in preterm labour and brain injury.  
 AUTHOR: Hagberg Henrik; Mallard Carina; Jacobsson Bo  
 CORPORATE SOURCE: Perinatal Center, Department of Obstetrics and Gynecology, Sahlgrenska University Hospital/Ostra, SE-416 85 Goteborg, Sweden.  
 SOURCE: BJOG : an international journal of obstetrics and gynaecology, (2005 Mar) Vol. 112 Suppl 1, pp. 16-8. Ref: 30  
 Journal code: 100935741. ISSN: 1470-0328.  
 PUB. COUNTRY: England: United Kingdom  
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
 General Review; (REVIEW)  
 LANGUAGE: English  
 FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals  
 ENTRY MONTH: 200505  
 ENTRY DATE: Entered STN: 18 Feb 2005  
 Last Updated on STN: 19 May 2005  
 Entered Medline: 18 May 2005

AB Intrauterine infection induces an intra-amniotic inflammatory response involving the activation of a number of cytokines and chemokines which, in turn, may trigger preterm contractions, cervical ripening and rupture of the membranes. Infection and cytokine-mediated inflammation appear to play a prominent role in preterm birth at early gestations (<30 weeks). The role of infection/inflammation in preterm birth in Europe has been incompletely characterised. The rate of preterm birth in Sweden is lower, and the rate of chorioamnionitis, bacterial vaginosis (BV), neonatal sepsis, and urinary tract infections during pregnancy is lower compared with the USA. In a Swedish population of women with preterm labour or preterm premature rupture of the membranes (PPROM) <34 weeks of gestation, microorganisms were detected in the amniotic fluid in 25% of women with PPRM and in 16% of those in preterm labour. Nearly half of these women had intra-amniotic inflammation defined as elevated interleukin-6 (IL-6) and IL-8, and there was a high degree of correlation between cytokine levels and preterm birth or the presence of microbial colonisation. These data do not support the hypothesis that infection-related preterm birth is less frequent in northern Europe than elsewhere. The intra-amniotic inflammatory response has also been associated with white matter injury and cerebral palsy. We find that in experimental models, induction of a systemic inflammatory response using lipopolysaccharide activates toll-like receptors (TLRs), which produce either white matter lesions or increase brain susceptibility to secondary insults. Recently, IL-18 in umbilical blood was shown to correlate with brain injury in preterm infants and IL-18 deficiency in mice decreases CNS vulnerability.

L14 ANSWER 10 OF 14 MEDLINE on STN  
 ACCESSION NUMBER: 2004091815 MEDLINE

DOCUMENT NUMBER: PubMed ID: 14980732  
 TITLE: Combined toxicity of prenatal bacterial endotoxin exposure and postnatal 6-hydroxydopamine in the adult rat midbrain.  
 AUTHOR: Ling Z D; Chang Q; Lipton J W; Tong C W; Landers T M; Carvey P M  
 CORPORATE SOURCE: Department of Pharmacology, 1735 West Harrison Street, Room 410, Rush University Medical Center, Chicago, IL 60612, USA.. zling@rush.edu  
 CONTRACT NUMBER: ES012307 (NIEHS)  
 ES10776 (NIEHS)  
 NS045316 (NINDS)  
 SOURCE: Neuroscience, (2004) Vol. 124, No. 3, pp. 619-28.  
 Journal code: 7605074. ISSN: 0306-4522.  
 PUB. COUNTRY: United States  
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
 (RESEARCH SUPPORT, NON-U.S. GOV'T)  
 (RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)  
 LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 200406  
 ENTRY DATE: Entered STN: 25 Feb 2004  
 Last Updated on STN: 4 Jun 2004  
 Entered Medline: 3 Jun 2004

AB We previously reported that injection of the Gram (-) bacteriotoxin, lipopolysaccharide (LPS), into gravid females at embryonic day 10.5 led to the birth of animals with fewer than normal dopamine (DA) neurons when assessed at postnatal days (P) 10 and 21. To determine if these changes continued into adulthood, we have now assessed animals at P120. As part of the previous studies, we also observed that the pro-inflammatory cytokine tumor necrosis factor alpha (TNFalpha) was elevated in the striatum, suggesting that these animals would be more susceptible to subsequent DA neurotoxin exposure. In order to test this hypothesis, we injected (at P99) 6-hydroxydopamine (6OHDA) or saline into animals exposed to LPS or saline prenatally. The results showed that animals exposed to prenatal LPS or postnatal 6OHDA alone had 33% and 46%, respectively, fewer DA neurons than controls, while the two toxins combined produced a less than additive 62% loss. Alterations in striatal DA were similar to, and significantly correlated with ( $r(2)=0.833$ ) the DA cell losses. Prenatal LPS produced a 31% increase in striatal TNFalpha, and combined exposure with 6OHDA led to an 82% increase. We conclude that prenatal exposure to LPS produces a long-lived THir cell loss that is accompanied by an inflammatory state that leads to further DA neuron loss following subsequent neurotoxin exposure. The results suggest that individuals exposed to LPS prenatally, as might occur had their mother had bacterial vaginosis, would be at increased risk for Parkinson's disease.

L14 ANSWER 11 OF 14 MEDLINE on STN  
 ACCESSION NUMBER: 2003418057 MEDLINE  
 DOCUMENT NUMBER: PubMed ID: 12957870  
 TITLE: Prenatal exposure to the bacteriotoxin lipopolysaccharide leads to long-term losses of dopamine neurons in offspring: a potential, new model of Parkinson's disease.  
 AUTHOR: Carvey Paul M; Chang Qin; Lipton Jack W; Ling Zaodung  
 CORPORATE SOURCE: Department of Pharmacology and Neurological Sciences1, Rush-Presbyterian-St. Luk'e Medical Center, 2242 West Harrison St. (Suite 260), Chicago, IL 60612, USA.. pcarvey@rush.edu  
 CONTRACT NUMBER: ES10776 (NIEHS)  
 NS0 45316 (NINDS)  
 SOURCE: Frontiers in bioscience : a journal and virtual library, (2003 Sep 1) Vol. 8, pp. s826-37. Electronic Publication: 2003-09-01. Ref: 102



Journal code: 9709506. E-ISSN: 1093-4715.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
(RESEARCH SUPPORT, NON-U.S. GOV'T)  
(RESEARCH SUPPORT, U.S. GOV'T, NON-P.H.S.)  
(RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)  
General Review; (REVIEW)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200310  
ENTRY DATE: Entered STN: 6 Sep 2003  
Last Updated on STN: 25 Oct 2003  
Entered Medline: 24 Oct 2003

AB The cause of Parkinson's disease (PD) is currently unknown. Although a genetic cause has been implicated in familial PD, the vast majority of cases are considered idiopathic. Environmental toxins have been implicated as a cause for PD by many investigators. Unfortunately, the magnitude of this exposure would likely need to be very high and as a result, would likely have been identified by the many epidemiological studies performed to date. Recently, we inadvertently realized that exposure to neurotoxins while still in utero may also represent a risk factor. Thus, exposure to the bacteriotoxin, lipopolysaccharide (LPS) during a critical developmental window in rats, leads to the birth of animals with fewer than normal dopamine (DA) neurons. This DA neuron loss is apparently permanent as it is still present in 16 months old animals (the longest period studied to date). Moreover, the loss of DA neurons seen in these animals increases with age thereby mimicking the progressive pattern of cell loss seen in human PD. The DA neuron loss is accompanied by reductions in striatal DA, increases in DA activity, and increased production of the pro-inflammatory cytokine Tumor Necrosis Factor alpha (TNF-alpha). These are also characteristics of the PD brain. This model therefore shares many of the same characteristics with PD, and most importantly exhibits a slow, protracted loss of DA neurons - a characteristics of this animal model not found in other models. Interestingly, a common complication of pregnancy is a condition known as bacterial vaginosis (BV), which is known to produce increased levels of LPS and pro-inflammatory cytokines in the chorioamniotic environment of the fetus. This raises the interesting possibility that BV may be a risk factor for PD. The possibility that prenatal toxin exposure may contribute to the development of a neurodegenerative disease of the aged raises interesting new pathogenic questions and draws attention to the possibility that in utero exposure to neurotoxins may represent a here to fore unrecognized cause of PD.

L14 ANSWER 12 OF 14 MEDLINE on STN  
ACCESSION NUMBER: 2002129895 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 11835448  
TITLE: In utero bacterial endotoxin exposure causes loss of tyrosine hydroxylase neurons in the postnatal rat midbrain.  
AUTHOR: Ling ZaoDung; Gayle Dave A; Ma Shang Yong; Lipton Jack W; Tong Chong Wai; Hong Jau-Shyong; Carvey Paul M  
CORPORATE SOURCE: Department of Pharmacology, Rush-Presbyterian-St. Luke's Medical Center, Chicago, Illinois, USA.. zling@rush.edu  
CONTRACT NUMBER: ES10776 (NIEHS)  
SOURCE: Movement disorders : official journal of the Movement Disorder Society, (2002 Jan) Vol. 17, No. 1, pp. 116-24.  
Journal code: 8610688. ISSN: 0885-3185.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
(RESEARCH SUPPORT, NON-U.S. GOV'T)  
(RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals

ENTRY MONTH: 200205  
ENTRY DATE: Entered STN: 28 Feb 2002  
Last Updated on STN: 28 May 2002  
Entered Medline: 24 May 2002

AB We investigated whether in utero exposure to the Gram(-) bacteriotoxin lipopolysaccharide (LPS) induces dopamine (DA) neuron loss in rats. The proinflammatory cytokine tumor necrosis factor alpha (TNF-alpha) kills DA neurons and is elevated in the brains of patients with Parkinson's disease (PD). LPS is a potent inducer of TNF-alpha, and both are increased in the chorioamniotic environment of women who have bacterial vaginosis (BV) during pregnancy, suggesting that BV might interfere with the normal development of fetal DA neurons. Gravid female rats were injected intraperitoneally with either LPS or normal saline at embryonic day 10.5 and their pups were killed at postnatal day 21. The brains of the pups were assessed for DA and TNF-alpha levels and DA cell counts in the mesencephalon using tyrosine hydroxylase immunoreactive (THir) cells as a DA neuron marker. Prenatal LPS exposure significantly reduced striatal DA (29%) and increased DA activity (72%) as well as TNF-alpha (101%). Stereological cell counts in the mesencephalon were also significantly reduced (27%) by prenatal LPS exposure. Prenatal exposure to LPS, as might occur in humans with BV, produces a significant loss of THir cells in rats that is still present 33 days following a single injection of LPS. Since this cell loss is well past the normal phase of DA neuron apoptosis that occurs in early postnatal life, rats so exposed may have a permanent loss of DA neurons, suggesting that prenatal infections may represent risk factors for PD. Copyright 2001 Movement Disorder Society.

L14 ANSWER 13 OF 14 MEDLINE on STN  
ACCESSION NUMBER: 89077309 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 3203257  
TITLE: Ultrastructure of the in situ adherence of Mobiluncus to vaginal epithelial cells.  
AUTHOR: De Boer J M; Plantema F H  
CORPORATE SOURCE: Department of Electron Microscopy and Molecular Cytology, University of Amsterdam, The Netherlands.  
SOURCE: Canadian journal of microbiology, (1988 Jun) Vol. 34, No. 6, pp. 757-66.  
Journal code: 0372707. ISSN: 0008-4166.  
PUB. COUNTRY: Canada  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 198902  
ENTRY DATE: Entered STN: 8 Mar 1990  
Last Updated on STN: 3 Feb 1997  
Entered Medline: 9 Feb 1989

AB From patients with bacterial vaginosis motile, anaerobic, comma-shaped bacteria can be isolated, which have recently been placed into the new genus Mobiluncus. In this study, electron microscopy was used to examine the in situ adherence of these motile curved rods to detached epithelial cells (comma cells) in vaginal fluid from two patients with bacterial vaginosis. Thin sections showed that the curved rods attached both directly to the epithelial cell surface and at various distances from it. It is concluded that after initial attachment these motile bacteria can grow at the epithelial cell surface in sessile microcolonies. Ruthenium red staining demonstrated a coating of precipitated glycocalyx material both on the surface of the curved rods and on their flagella. This may indicate that in situ the adherent curved rods were enclosed in a very hydrated matrix of exopolysaccharides. Conspicuous was the ability of the curved rods to attach to the epithelial cell surface via their cell tips. However, in situ no specialized bacteria cell surface structures were seen that might explain this polar attachment.

Electron microscopy of pure cultures demonstrated that both *Mobiluncus curtisii* subsp. *curtisii* and *Mobiluncus mulieris* can produce a glycocalyx in vitro.

L14 ANSWER 14 OF 14 MEDLINE on STN  
ACCESSION NUMBER: 85272411 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 6598919  
TITLE: Haemagglutination by vaginal anaerobic curved rods and its inhibition by oligosaccharides.  
AUTHOR: Mardh P A; Svensson S  
SOURCE: Scandinavian journal of urology and nephrology. Supplementum, (1984) Vol. 86, pp. 179-84. Journal code: 0153034. ISSN: 0300-8886.  
PUB. COUNTRY: Sweden  
DOCUMENT TYPE: (IN VITRO)  
Journal; Article; (JOURNAL ARTICLE)  
(RESEARCH SUPPORT, NON-U.S. GOV'T)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 198508  
ENTRY DATE: Entered STN: 20 Mar 1990  
Last Updated on STN: 20 Mar 1990  
Entered Medline: 27 Aug 1985  
AB Except for occasional (6/45) strains, both the short (21/24) and long (16/21) variants of anaerobic curved rods isolated from the vagina of women with bacterial vaginosis were capable of agglutinating human, guinea pig and sheep erythrocytes. The agglutination was not affected by heat treatment, i.e. up to 80 degrees C for 30 minutes, of the bacteria prior to use. Nor was the agglutination influenced by 50 mM EDTA or 50 mM D-mannose. To elucidate receptors on the erythrocyte membrane responsible for the agglutination, various free oligosaccharides and glycoproteins were tested for haemagglutination-inhibiting capacity, using representative strains of the short variant. Glycoproteins containing terminal lactosamine structures inhibited the agglutination.

L14 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1332559 CAPLUS  
DOCUMENT NUMBER: 144:156665  
TITLE: Manufacture and application of microbial agent  
INVENTOR(S): Cui, Yunlong  
PATENT ASSIGNEE(S): Qingdao Eastsea Pharmaceutical Co., Ltd., Peop. Rep.  
China; Beijing Dongfang Baixin Biotechnology Co., Ltd.  
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 19 pp.  
CODEN: CNXXEV  
DOCUMENT TYPE: Patent  
LANGUAGE: Chinese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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CN 1663573	A	20050907	CN 2004-10006125	20040304
PRIORITY APPLN. INFO.:			CN 2004-10006125	20040304

AB The title microbial agent comprises Bifidobacterium, Lactobacillus, Bacillus coagulans, or/and Clostridium butyricum, fermented supernatant, oligosaccharides, polysaccharides, and traditional Chinese medicine exts. The agent can be made into various forms including oral liqs., aerosols, lotions, capsules, tablets, powders, and suppositories. The agent can be used to treat and prevent acute or chronic diarrhea and constipation, bacterial vaginosis and infectious vaginitis.

L14 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:359875 CAPLUS  
DOCUMENT NUMBER: 143:660  
TITLE: Lactoferrin has a potential of preventive effect on preterm delivery by regulation of inflammatory cytokines  
AUTHOR(S): Otsuki, Katsufumi; Hasegawa, Akitoshi; Sawada, Maki; Mitsukawa, Kaori; Chiba, Hiroshi; Nagatsuka, Masaaki; Okai, Takasi  
CORPORATE SOURCE: Dep. Obstetrics and Gynecol., Sch. Med., Showa Univ., Tokyo, 142-8666, Japan  
SOURCE: Miruku Saiensu (2004), 53(4), 304-305  
CODEN: MISAFD; ISSN: 1343-0289  
PUBLISHER: Nippon Rakuno Kagakkai  
DOCUMENT TYPE: Journal  
LANGUAGE: Japanese

AB Lactoferrin (LF) concns. in the cervical mucus of pregnant women with cervicitis (n = 32) and bacterial vaginosis (n = 17) were 15.7 and 16.3 µg/mL, resp., and significantly higher than that (8.0 µg/mL) of healthy pregnant women (n = 68). LF (100 and 1000 ng/mL) significantly prevented the induction of IL-6 by lipopolysaccharide (LPS) in primary cultured cells from amnion of 10 mo pregnant women. Recombinant human LF (rhLF) inhibited in vitro growth of E. coli in the presence of HeLa cells with mucus-producing ability but not ME-180 cells without such ability. In mouse models of preterm delivery induced by i.p. injection of LPS (50 µg/kg), i.p. injection of rhLF (1.0 mg/body) 2 h before LPS injection prevented the preterm delivery. Both IL-6 and TNF-α concns. in maternal serum and amniotic fluid were significantly lower in the rhLF-pretreated mice than in mice treated with LPS alone. In rabbit models of preterm delivery induced by intrauterine injection of E. coli (10<sup>7</sup> CFU/body), intrauterine injection of rhLF (5 mg/body) 2 h before E. coli injection prevented the preterm delivery. Maternal serum TNF-α concentration was significantly lower in the rhLF-pretreated rabbits than in rabbits treated with E. coli alone. The stillbirth rate in rhLF-pretreated rabbits was significantly lower than that in rabbits treated with E. coli alone. These results

suggest that LF is probably useful for the prevention of preterm delivery associated with chorioamnionitis.

L14 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:323826 CAPLUS  
DOCUMENT NUMBER: 142:360897  
TITLE: Vaginal pharmaceutical compositions containing antimicrobial imidazoles  
INVENTOR(S): Bentley, Christine Lynn; Feldtmose, Karen  
PATENT ASSIGNEE(S): USA  
SOURCE: U.S. Pat. Appl. Publ., 9 pp.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005080038	A1	20050414	US 2004-946133	20040922
PRIORITY APPLN. INFO.:			US 2003-505448P	P 20030925

AB Vaginal pharmaceutical compns. are described. These compns. contain (i) an active pharmaceutical ingredient selected from the group consisting of antimicrobial imidazoles and mixts. thereof, and (ii) a polysaccharide, wherein the pH of the composition is greater than 4.25 and less than about 8. In particularly preferred compns., the active pharmaceutical ingredient includes metronidazole and the polysaccharide includes hypromellose. These compns. can be applied to vaginal tissue for treatment of various diseases, such as bacterial vaginosis, or for prophylaxis. A metronidazole vaginal gel was prepared

L14 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:260516 CAPLUS  
DOCUMENT NUMBER: 142:461695  
TITLE: Role of cytokines in preterm labour and brain injury  
AUTHOR(S): Hagberg, Henrik; Mallard, Carina; Jacobsson, Bo  
CORPORATE SOURCE: Perinatal Center, Department of Obstetrics and Gynecology, Sahlgrenska Academy, Goeteborg, Swed.  
SOURCE: BJOG (2005), 112(Suppl. 1), 16-18  
CODEN: BIOGFQ; ISSN: 1470-0328  
PUBLISHER: Blackwell Publishing Ltd.  
DOCUMENT TYPE: Journal; General Review  
LANGUAGE: English

AB A review. Intrauterine infection induces an intra-amniotic inflammatory response involving the activation of a number of cytokines and chemokines which, in turn, may trigger preterm contractions, cervical ripening and rupture of the membranes. Infection and cytokine-mediated inflammation appear to play a prominent role in preterm birth at early gestations (<30 wk). The role of infection/inflammation in preterm birth in Europe has been incompletely characterized. The rate of preterm birth in Sweden is lower, and the rate of chorioamnionitis, bacterial vaginosis (BV), neonatal sepsis, and urinary tract infections during pregnancy is lower compared with the USA. In a Swedish population of women with preterm labour or preterm premature rupture of the membranes (PPROM) <34 wk of gestation, microorganisms were detected in the amniotic fluid in 25% of women with PPROM and in 16% of those in preterm labour. Nearly half of these women had intra-amniotic inflammation defined as elevated interleukin-6 (IL-6) and IL-8, and there was a high degree of correlation between cytokine levels and preterm birth or the presence of microbial colonization. These data do not support the hypothesis that infection-related preterm birth is less frequent in northern Europe than elsewhere. The intra-amniotic inflammatory response has also been associated with white matter injury and cerebral palsy. We find that in exptl.

models, induction of a systemic inflammatory response using lipopolysaccharide activates toll-like receptors (TLRs), which produce either white matter lesions or increase brain susceptibility to secondary insults. Recently, IL-18 in umbilical blood was shown to correlate with brain injury in preterm infants and IL-18 deficiency in mice decreases CNS vulnerability.

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:151478 CAPLUS

DOCUMENT NUMBER: 140:351883

TITLE: Combined toxicity of prenatal bacterial endotoxin exposure and postnatal 6-hydroxydopamine in the adult rat midbrain

AUTHOR(S): Ling, Z. D.; Chang, Q.; Lipton, J. W.; Tong, C. W.; Landers, T. M.; Carvey, P. M.

CORPORATE SOURCE: Department of Pharmacology, Rush University Medical Center, Chicago, IL, 60612, USA

SOURCE: Neuroscience (Oxford, United Kingdom) (2004), 124(3), 619-628

CODEN: NRSCDN; ISSN: 0306-4522

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We previously reported that injection of the Gram (-) bacteriotoxin, lipopolysaccharide (LPS), into gravid females at embryonic day 10.5 led to the birth of animals with fewer than normal dopamine (DA) neurons when assessed at postnatal days (P) 10 and 21. To determine if these changes continued into adulthood, we have now assessed animals at P120. As part of the previous studies, we also observed that the pro-inflammatory cytokine tumor necrosis factor  $\alpha$  (TNF $\alpha$ ) was elevated in the striatum, suggesting that these animals would be more susceptible to subsequent DA neurotoxin exposure. In order to test this hypothesis, we injected (at P99) 6-hydroxydopamine (6OHDA) or saline into animals exposed to LPS or saline prenatally. The results showed that animals exposed to prenatal LPS or postnatal 6OHDA alone had 33% and 46%, resp., fewer DA neurons than controls, while the two toxins combined produced a less than additive 62% loss. Alterations in striatal DA were similar to, and significantly correlated with ( $r^2 = 0.833$ ) the DA cell losses. Prenatal LPS produced a 31% increase in striatal TNF $\alpha$ , and combined exposure with 6OHDA led to an 82% increase. We conclude that prenatal exposure to LPS produces a long-lived THir cell loss that is accompanied by an inflammatory state that leads to further DA neuron loss following subsequent neurotoxin exposure. The results suggest that individuals exposed to LPS prenatally, as might occur had their mother had bacterial vaginosis, would be at increased risk for Parkinson's disease.

REFERENCE COUNT: 66 THERE ARE 66 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:459851 CAPLUS

DOCUMENT NUMBER: 139:287396

TITLE: Prenatal exposure to the bacteriotoxin lipopolysaccharide leads to long-term losses of dopamine neurons in offspring: A potential, new model of Parkinson's disease

AUTHOR(S): Carvey, Paul M.; Chang, Qin; Lipton, Jack W.; Ling, Zaodung

CORPORATE SOURCE: Department of Pharmacology and Neurological Sciences, Rush-Presbyterian-St. Luke Medical Center, Chicago, IL, 60612, USA

SOURCE: Frontiers in Bioscience (2003), 8, S826-S837

CODEN: FRBIF6; ISSN: 1093-4715

URL: <http://www.bioscience.org/2003/v8/s/1158/pdf.pdf>

PUBLISHER:

Frontiers in Bioscience

DOCUMENT TYPE:

Journal; General Review; (online computer file)

LANGUAGE:

English

AB A review with data on the prenatal exposure to the bacteriotoxin lipopolysaccharide leads to long-term losses of dopamine neurons in offspring and potential, new model of Parkinson's disease. The cause of Parkinson's disease (PD) is currently unknown. Although a genetic cause has been implicated in familial PD, the vast majority of cases are considered idiopathic. Environmental toxins have been implicated as a cause for PD by many investigators. Unfortunately, the magnitude of this exposure would likely need to be very high and as a result, would likely have been identified by the many epidemiol. studies performed to date. Recently, the authors inadvertently realized that exposure to neurotoxins while still in utero may also represent a risk factor. Thus, exposure to the bacteriotoxin, lipopolysaccharide (LPS) during a critical developmental window in rats, leads to the birth of animals with fewer than normal dopamine (DA) neurons. This DA neuron loss is apparently permanent as it is still present in 16 mo old animals (the longest period studied to date). Moreover, the loss of DA neurons seen in these animals increases with age thereby mimicking the progressive pattern of cell loss seen in human PD. The DA neuron loss is accompanied by redns. in striatal DA, increases in DA activity, and increased production of the pro-inflammatory cytokine tumor necrosis factor- $\alpha$  (TNF- $\alpha$ ). These are also characteristics of the PD brain. This model therefore shares many of the same characteristics with PD, and most importantly exhibits a low, protracted loss of DA neurons - a characteristics of this animal model not found in other models. Interestingly, a common complication of pregnancy is a condition known as bacterial vaginosis (BV), which is known to produce increased levels of LPS and pro-inflammatory cytokines in the chorioamniotic environment of the fetus. This raises the interesting possibility that BV may be a risk factor for PD. The possibility that prenatal toxin exposure may contribute to the development of a neurodegenerative disease of the aged raises interesting new pathogenic questions and draws attention to the possibility that in utero exposure to neurotoxins may represent a here to fore unrecognized cause of PD.

REFERENCE COUNT:

102

THERE ARE 102 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1018639 CAPLUS  
DOCUMENT NUMBER: 143:284725  
TITLE: Anti-female infection specific IgY and its medical preparation  
INVENTOR(S): Bao, Shing; Lee, Tung Sum  
PATENT ASSIGNEE(S): Jason Medical Group Far East Limited, Hong Kong  
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 14 pp.  
CODEN: CNXXEV  
DOCUMENT TYPE: Patent  
LANGUAGE: Chinese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1454901	A	20031112	CN 2003-136958	20030610
PRIORITY APPLN. INFO.:			CN 2003-136958	20030610

AB The anti-female infection specific IgY is prepared by immunization with the antigens those are isolated from key pathogenic bacteria such as *Gardnerella vaginalis*, *Trichomonas vaginalis*, *Candida albicans*, and *Hemophilus ducreyi*. The lotion for preventing from female infections is composed of the specific IgY 0.1, glycerol 2, eucalyptus oil 0.1, mint essence 0.2, borneol 0.1, ethanol 0.75%, and water to 200 L. The spray is composed of the IgY 0.05, mint essence 0.2, menthol 0.1, glycerol 2%, a suitable amount of 1% brilliant green solution, and water to 200 L. The effervescent tablet or capsule is composed of the IgY 0.5, citric acid 15, NaHCO<sub>3</sub> 17, H<sub>3</sub>BO<sub>3</sub> 5, lactose 31.1, microcryst. cellulose 30, foam stabilizing agent 0.4, Mg stearate 1%, and a suitable amount of 10% PVP/ethanol solution. The gel is composed of the IgY 5, carbopol-934 1, HPMC 0.5, triethanolamine 1, glycerol 10, ethanol 7.5, eucalyptus oil 1, mint essence 1, menthol 0.1, and water to 100%. The ointment is composed of the IgY 2, stearic acid 6.1, octadecanol 6.1, liquid paraffin 9.0, white vaseline 6.1, Span-80 0.85, glycerol 10, K sorbate 0.1, Tween-80 4.5, menthol 0.2, and water to 100%. The suppository is composed of the IgY 1.5, gelatin 32.85, glycerol 32.75, and water 32.90%.

L15 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:554138 CAPLUS  
DOCUMENT NUMBER: 129:297978  
TITLE: *Gardnerella*-associated vaginitis: comparison of three treatment modalities  
AUTHOR(S): Ozmen, Selale; Turhan, Nilgun, O.; Seckin, Neslihan C.  
CORPORATE SOURCE: Turkish Health and Therapy Foundation, Ankara, Turk.  
SOURCE: Turkish Journal of Medical Sciences (1998), 28(2), 171-173  
CODEN: TJMEEA; ISSN: 1300-0144  
PUBLISHER: Scientific and Technical Research Council of Turkey  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB To compare three different treatment protocols for *Gardnerella vaginalis* with respect to cure rates and secondary vulvovaginal candidiasis. In this prospective randomized study, initially 2285 patients with symptoms of bacterial vaginosis were evaluated. Three hundred and seven of them in whom *Gardnerella vaginalis* was recovered were eligible for the study. Group I (114 patients) was given oral metronidazole 500mg twice daily for one week; Group II (96 patients) was prescribed oral metronidazole for one week plus a vaginal suppository of lyophilized lactobacilli, estriol and lactose for twelve days. The third group (97 patients) was treated only with the lactobacilli, estriol and lactose suppositories for twelve days. If the patient was relieved of her symptoms and *Gardnerella vaginalis* was not detected micro-biol. at the second visit, it was



considered as a cure. The treatment outcomes were compared by Chi-square test and a p value below 0.05 was considered as significant. The cure rate of Group III(55.6%) was significantly lower than the cure rates of Group I(87.7%)and II (92.7%) (p=0.0001). Secondary vaginal candidiasis at the completion of the therapy was significantly lower in the second (3.1%) and the third groups (2.1%), while this rate was 12.2% for the first group (p=003). Metronidazole followed by lactobacilli, estriol and lactate suppositories were found to be the best therapy model with respect to cure and secondary candidiasis rates.

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 3 OF 4 MEDLINE on STN  
ACCESSION NUMBER: 88171415 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 3502136  
TITLE: Haemagglutination and tissue culture adhesion of Gardnerella vaginalis.  
AUTHOR: Scott T G; Smyth C J  
CORPORATE SOURCE: Department of Biological Sciences, Dublin Institute of Technology, Republic of Ireland.  
SOURCE: Journal of general microbiology, (1987 Aug) Vol. 133, No. 8, pp. 1999-2005.  
Journal code: 0375371. ISSN: 0022-1287.  
PUB. COUNTRY: ENGLAND: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
(RESEARCH SUPPORT, NON-U.S. GOV'T)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 198804  
ENTRY DATE: Entered STN: 8 Mar 1990  
Last Updated on STN: 8 Mar 1990  
Entered Medline: 28 Apr 1988

AB Six strains of Gardnerella vaginalis were studied to examine the adhesin-receptor mechanism involved in their attachment to human red blood cells and an epithelial tissue culture cell line (McCoy). The adhesins involved in the attachment of the bacteria to each of these cells were proteinaceous but showed marked differences after various chemical or physical treatments, indicating that separate adhesins were present. Haemagglutinating strains were more hydrophobic than tissue-culture-adherent strains. Haemagglutination of human red blood cells by strains of G. vaginalis was inhibited by galactose, lactose, N-acetylneuraminic acid and phosphatidylserine. In contrast, the tissue-culture adherence of strains was not inhibited by these substances.

L15 ANSWER 4 OF 4 MEDLINE on STN  
ACCESSION NUMBER: 86309760 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 2875237  
TITLE: Streptococci as urinary pathogens.  
AUTHOR: Collins L E; Clarke R W; Maskell R  
SOURCE: Lancet, (1986 Aug 30) Vol. 2, No. 8505, pp. 479-81.  
Journal code: 2985213R. ISSN: 0140-6736.  
PUB. COUNTRY: ENGLAND: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
(RESEARCH SUPPORT, NON-U.S. GOV'T)  
LANGUAGE: English  
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals  
ENTRY MONTH: 198610  
ENTRY DATE: Entered STN: 21 Mar 1990  
Last Updated on STN: 6 Feb 1995  
Entered Medline: 3 Oct 1986

AB In a 2-month prospective study of streptococci isolated from urine specimens in the laboratory, 242 strains of catalase-negative gram-positive cocci or coccobacilli were isolated in substantial numbers

from 11,725 specimens. These comprised 10% of the important isolates. Species identification of all isolates was undertaken. 74 (30%) of the isolates were of species other than *Streptococcus faecalis* and *S. agalactiae*. 79 (33%) were not detected on cysteine-lactose -electrolyte-deficient agar after overnight incubation in a carbon dioxide incubator. 20 of the 24 isolates of coccobacilli were *Gardnerella vaginalis*. Many of the isolates of fastidious species were accompanied by pyuria. An isolation protocol practicable in busy laboratories is proposed.

L16 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:554138 CAPLUS

DOCUMENT NUMBER: 129:297978

TITLE: Garnerella-associated vaginitis: comparison of three treatment modalities

AUTHOR(S): Ozmen, Selale; Turhan, Nilgun, O.; Seckin, Neslihan C.

CORPORATE SOURCE: Turkish Health and Therapy Foundation, Ankara, Turk.

SOURCE: Turkish Journal of Medical Sciences (1998), 28(2), 171-173

CODEN: TJMEEA; ISSN: 1300-0144

PUBLISHER: Scientific and Technical Research Council of Turkey

DOCUMENT TYPE: Journal

LANGUAGE: English

AB To compare three different treatment protocols for Gardnerella vaginalis with respect to cure rates and secondary vulvovaginal candidiasis. In this prospective randomized study, initially 2285 patients with symptoms of bacterial vaginosis were evaluated. Three hundred and seven of them in whom Gardnerella vaginalis was recovered were eligible for the study. Group I (114 patients) was given oral metronidazole 500mg twice daily for one week; Group II (96 patients) was prescribed oral metronidazole for one week plus a vaginal suppository of lyophilized lactobacilli, estriol and lactose for twelve days. The third group (97 patients) was treated only with the lactobacilli, estriol and lactose suppositories for twelve days. If the patient was relieved of her symptoms and Gardnerella vaginalis was not detected micro-biol. at the second visit, it was considered as a cure. The treatment outcomes were compared by Chi-square test and a p value below 0.05 was considered as significant. The cure rate of Group III(55.6%) was significantly lower than the cure rates of Group I(87.7%)and II (92.7%) (p=0.0001). Secondary vaginal candidiasis at the completion of the therapy was significantly lower in the second (3.1%) and the third groups (2.1%), while this rate was 12.2% for the first group (p=003). Metronidazole followed by lactobacilli, estriol and lactate suppositories were found to be the best therapy model with respect to cure and secondary candidiasis rates.

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:229518 CAPLUS

DOCUMENT NUMBER: 139:67916

TITLE: Safety Aspects of Lactobacillus and Bifidobacterium Species Originating from Human Oro-gastrointestinal Tract or from Probiotic Products

AUTHOR(S): Saarela, Maria; Matto, Jaana; Mattila-sandholm, Tiina

CORPORATE SOURCE: VTT Biotechnology, Espoo, 02044 VTT, Finland

SOURCE: Microbial Ecology in Health and Disease (2002), 14(4), 233-240

CODEN: MEHDE6; ISSN: 0891-060X

PUBLISHER: Taylor & Francis Ltd.

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review. Probiotics are live microbial prepns., which have documented health benefits for the consumers by maintaining or improving their intestinal microbiota balance. Established probiotic effects include improved lactose digestion, modulation of gut microbiota, immune modulation, reduced duration of rotavirus diarrhea, changes in biomarkers such as harmful fecal enzyme activities, alleviation of atopic dermatitis symptoms in babies, and pos. effects against superficial bladder cancer and cervical cancer. Most bacteria that have probiotic properties belong to the genera Lactobacillus and Bifidobacterium. Since probiotic consumption involves ingestion of large nos. of viable bacterial cells (daily dosage between log 9 and log 11 CFU) safety aspects of probiotic consumption are of utmost importance. Knowledge on the survival of probiotics in the GI-tract, their translocation and colonization properties and the fate of probiotic-derived active components is important for the evaluation of possible neg. and pos. effects of probiotic consumption. Assessing the risks of probiotic consumption can be a very expensive and time-consuming task. While considering the risk of probiotic consumption we have to keep in mind that lactic acid bacteria have been globally consumed in a myriad of fermented food varieties (milk, meat, vegetable and cereal products) for a very long time without an indication that they could be generally harmful to the consumers' health. In Finland lactobacilli strains isolated from bacteremia have been systematically characterized. Although the yearly consumption of probiotic products containing lactobacilli has increased during the last 10 yr, the incidence of lactobacillemia has not increased. There is one local infection case with an indistinguishable isolate to L. rhamnosus GG. The extensive follow-up period indicates that the risk of serious infection by one single probiotic strain is very low. Simultaneously, it is difficult to estimate all the health benefits the same probiotic strain has implemented, also in immunocompromised patients. However, no live bacterium can be guaranteed for a zero risk in each individual host since the outcome of bacterial ingestion (passage through GI-tract, colonization, infection) is determined both by the host and the bacterium.

REFERENCE COUNT: 97 THERE ARE 97 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:788148 CAPLUS

DOCUMENT NUMBER: 138:186880

TITLE: Probiotics: an overview of beneficial effects

AUTHOR(S): Ouwehand, Arthur C.; Salminen, Seppo; Isolauri, Erika

CORPORATE SOURCE: Department of Biochemistry and Food Chemistry, University of Turku, Turku, FIN-20014, Finland

SOURCE: Antonie van Leeuwenhoek (2002), 82(1-4), 279-289

CODEN: ALJMAO; ISSN: 0003-6072

PUBLISHER: Kluwer Academic Publishers

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review. Food products fermented by lactic acid bacteria have long been used for their proposed health promoting properties. In recent years, selected probiotic strains were thoroughly investigated for specific health effects. Properties like relief of lactose intolerance symptoms and shortening of rotavirus diarrhoea are now widely accepted for selected probiotics. Some areas, such as the treatment and prevention of atopy hold great promise. However, many proposed health effects still need addnl. investigation. In particular the potential benefits for the healthy consumer, the main market for probiotic products, requires more attention. Also, the potential use of probiotics outside the gastrointestinal tract deserves to be explored further. Results from well conducted clin. studies will expand and increase the acceptance of probiotics for the treatment and prevention of selected diseases.

REFERENCE COUNT: 83 THERE ARE 83 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:26048 CAPLUS  
DOCUMENT NUMBER: 128:74634  
TITLE: Lactose intolerance and consumption of milk and dairy products  
AUTHOR(S): Sieber, R.; Stransky, M.; De Vrese, M.  
CORPORATE SOURCE: Forschungsanstalt Milchwirtschaft, Bern, CH-3003, Switz.  
SOURCE: Zeitschrift fuer Ernaehrungswissenschaft (1997), 36(4), 375-393  
CODEN: ZERNAL; ISSN: 0044-264X  
PUBLISHER: Dr. Dietrich Steinkopff Verlag GmbH & Co. KG  
DOCUMENT TYPE: Journal; General Review  
LANGUAGE: German

AB A review is given with 115 refs. The disaccharide lactose is present as a natural component of foods only in milk and dairy products. In the gastrointestinal tract, lactose is hydrolyzed by the enzyme  $\beta$ -galactosidase (lactase) into glucose and galactose. These components are absorbed. With the exception of the caucasian race, the lactase activity decreases in most people at an age of 4-6 yr. Lactose intake can cause symptoms of bloating, flatulence, abdominal pain, and diarrhea due to the lactose reaching the large intestine. This phenomenon is called lactose intolerance. It is generally recommended to those persons that they refrain from the consumption of milk and dairy products. However, most lactose-intolerant people are able to digest small amts. of milk. They can also consume cheese that contains no (hard and semi-hard) or only small amts. of lactose (present in only 10% of soft cheeses). These products are very important sources of Ca. Compared to milk, the lactose content of yogurt is usually lower by 1/3. Studies during the last 10 yr have shown that in spite of its lactose content yogurt is very well tolerated by lactose intolerant persons. This advantage is ascribed to the presence of living lactic acid bacteria in fermented dairy products which survive passage through the stomach and also to the lactase present in these products.

L18 ANSWER 4 OF 6 MEDLINE on STN

ACCESSION NUMBER: 2006268713 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 16696665  
TITLE: Probiotics and their fermented food products are beneficial for health.  
AUTHOR: Parvez S; Malik K A; Ah Kang S; Kim H-Y  
CORPORATE SOURCE: Helix Pharms Co. Ltd, Kyung-Hee University, and Department of Biological Sciences of Oriental Medicine, Graduate School of Interdepartmental Studies, Institute of Oriental Medicines, Kyung-Hee University, Dongdaemoon-gu, Seoul,

Korea.  
SOURCE: Journal of applied microbiology, (2006 Jun) Vol. 100, No. 6, pp. 1171-85. Ref: 134  
Journal code: 9706280. ISSN: 1364-5072.  
PUB. COUNTRY: England: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
General Review; (REVIEW)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200609  
ENTRY DATE: Entered STN: 16 May 2006  
Last Updated on STN: 30 Sep 2006  
Entered Medline: 29 Sep 2006

AB Probiotics are usually defined as microbial food supplements with beneficial effects on the consumers. Most probiotics fall into the group of organisms' known as lactic acid-producing bacteria and are normally consumed in the form of yogurt, fermented milks or other fermented foods. Some of the beneficial effect of lactic acid bacteria consumption include: (i) improving intestinal tract health; (ii) enhancing the immune system, synthesizing and enhancing the bioavailability of nutrients; (iii) reducing symptoms of lactose intolerance, decreasing the prevalence of allergy in susceptible individuals; and (iv) reducing risk of certain cancers. The mechanisms by which probiotics exert their effects are largely unknown, but may involve modifying gut pH, antagonizing pathogens through production of antimicrobial compounds, competing for pathogen binding and receptor sites as well as for available nutrients and growth factors, stimulating immunomodulatory cells, and producing lactase. Selection criteria, efficacy, food and supplement sources and safety issues around probiotics are reviewed. Recent scientific investigation has supported the important role of probiotics as a part of a healthy diet for human as well as for animals and may be an avenue to provide a safe, cost effective, and 'natural' approach that adds a barrier against microbial infection. This paper presents a review of probiotics in health maintenance and disease prevention.

L18 ANSWER 5 OF 6 MEDLINE on STN  
ACCESSION NUMBER: 2002612532 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 12369194  
TITLE: Probiotics: an overview of beneficial effects.  
AUTHOR: Ouwehand Arthur C; Salminen Seppo; Isolauri Erika  
CORPORATE SOURCE: Department of Biochemistry and Food Chemistry, University of Turku, FIN-20014 Turku, Finland.. arthur.ouwehand@utu.fi  
SOURCE: Antonie van Leeuwenhoek, (2002 Aug) Vol. 82, No. 1-4, pp. 279-89. Ref: 83  
Journal code: 0372625. ISSN: 0003-6072.  
PUB. COUNTRY: Netherlands  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
General Review; (REVIEW)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200302  
ENTRY DATE: Entered STN: 10 Oct 2002  
Last Updated on STN: 14 Feb 2003  
Entered Medline: 12 Feb 2003

AB Food products fermented by lactic acid bacteria have long been used for their proposed health promoting properties. In recent years, selected probiotic strains have been thoroughly investigated for specific health effects. Properties like relief of lactose intolerance symptoms and shortening of rotavirus diarrhoea are now widely accepted for selected probiotics. Some areas, such as the treatment and prevention of atopy hold great promise. However, many proposed health effects still need additional investigation. In particular the potential benefits for the healthy

consumer, the main market for probiotic products, requires more attention. Also, the potential use of probiotics outside the gastrointestinal tract deserves to be explored further. Results from well conducted clinical studies will expand and increase the acceptance of probiotics for the treatment and prevention of selected diseases.

L18 ANSWER 6 OF 6 MEDLINE on STN  
ACCESSION NUMBER: 1998128291 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 9467238  
TITLE: [Lactose intolerance and consumption of milk and milk products].  
Laktoseintoleranz und Verzehr von Milch und Milchprodukten.  
AUTHOR: Sieber R; Stransky M; de Vrese M  
CORPORATE SOURCE: Institut fur Physiologie und Biochemie der Ernährung  
Bundesanstalt fur Milchforschung, Kiel.  
SOURCE: Zeitschrift fur Ernährungswissenschaft, (1997 Dec) Vol. 36,  
No. 4, pp. 375-93. Ref: 115  
Journal code: 0413632. ISSN: 0044-264X.  
PUB. COUNTRY: GERMANY: Germany, Federal Republic of  
DOCUMENT TYPE: (ENGLISH ABSTRACT)  
Journal; Article; (JOURNAL ARTICLE)  
General Review; (REVIEW)  
LANGUAGE: German  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199803  
ENTRY DATE: Entered STN: 26 Mar 1998  
Last Updated on STN: 26 Mar 1998  
Entered Medline: 13 Mar 1998

AB The disaccharide lactose is present as a natural component of foods only in milk and dairy products. In the gastrointestinal tract, lactose is hydrolysed by the enzyme beta-galactosidase (lactase) into glucose and galactose. These components are absorbed. With the exception of the caucasian race, the lactase activity decreases in most people at an age of 4 to 6 years. Lactose intake can cause symptoms of bloating, flatulence, abdominal pain, and diarrhea due to the lactose reaching the large intestine. This phenomenon is called lactose intolerance. It is generally recommended to those persons that they refrain from the consumption of milk and dairy products. However, most lactose intolerant people are able to digest small amounts of milk. They can also consume cheese that contains no (hard and semi-hard) or only small amounts of lactose (present in only 10% of soft cheeses). These products are very important sources of calcium. Compared to milk, the lactose content of yogurt is usually lower by about one third. Studies during the last 10 years have shown that in spite of its lactose content yogurt is very well tolerated by lactose intolerant persons. This advantage is ascribed to the presence of living lactic acid bacteria in fermented dairy products which survive passage through the stomach and also to the lactase present in these products.

ACCESSION NUMBER: 1917:4726 CAPLUS  
 DOCUMENT NUMBER: 11:4726  
 ORIGINAL REFERENCE NO.: 11:971f-i,972a-h  
 TITLE: Biology of *Oidium lactis*  
 AUTHOR(S): Linossier, G.  
 CORPORATE SOURCE: Paris  
 SOURCE: Comptes Rendus des Seances de la Societe de Biologie  
 et de Ses Filiales (1916), 79, 309-13  
 CODEN: CRSBAW; ISSN: 0037-9026

DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable

AB This *Oidium lactis* (designated as *O. lactis* A. to distinguish it from the saprophytic *O. lactis*) was isolated from the sputum of a patient with symptoms of pulmonary tuberculosis (no tubercle bacilli were, however, detected); it occurred in the form of false membranes associated with pneumococci. This microorganism was not morphologically distinct from the saprophytic *O. lactis* and the following expts. were undertaken for the purpose of detecting a possible biological distinction: *O. lactis* A. thrived on a medium composed of distilled H<sub>2</sub>O, KH<sub>2</sub>PO<sub>4</sub>, MgSO<sub>4</sub>, CaCl<sub>2</sub>, FeSO<sub>4</sub>, ZnSO<sub>4</sub>, Na<sub>4</sub>SiO<sub>4</sub> in the resp. proportions of 1000, 0.75, 0.50, 0.05, 0.02, 0.02, traces (suitable carbohydrate and nitrogenous constituents were added). Abundant access of air was also favorable to its development; the relative wts. of cultures obtained with thick and thin layers of nutrient liquid (after 10 days at ordinary temperature) were as 100 and 144, resp. The foregoing solution of salts (with the addition of 10 cc. of glycerol per l.) was distributed in vols. of 50 cc. in a series of flasks; amts. of various nitrogeneous substances corresponding in all cases to 14 mgs. of N were then added to the flasks after which the contents were sterilized and inoculated with a trace of *O. lactis* A. The following relative wts. of cultures (after washing and drying) were obtained for the resp. N compds. indicated: urea 100, leucine 85, alanine 76, NH<sub>4</sub> tartrate 73, glycocoll 24, (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> 21, peptone 16, gelatin 2.7, KNO<sub>3</sub> 0.7, KNO<sub>2</sub> 0.3, control without N 0.3. Casein had about the same order of value as gelatin. In another experiment the foregoing solution of salts (with the addition of 1.2 g. urea per l.) was distributed in 100 cc. vols. in a number of flasks; various carbohydrates were then added, the amount in each case being such that a constant weight (0.96 g.) of O would be required for complete oxidation. After sterilization and inoculation the flasks were kept at room temperature. The relative wts. of the cultures (after washing and drying) for the various sugars employed were (after 8 days): dextrose 100, levulose 107, galactose 52. The relatively large wts. of the cultures obtained, when compared with the amount of sugar consumed, indicate that *O. lactis* A. did not (in spite of the presence of a considerable amount of yeast in the cultures) produce alc. fermentation; other considerations indicate that alc., if produced in appreciable amount, would be consumed by the microorganism. Less than 0.5% of alc. was obtained when a raisin must was inoculated with *O. lactis* A. and kept for 3 mos. under the most favorable conditions for the production of alc. fermentation. This organism did not produce appreciable amts. of acid at the expense of sugar; the culture liquids showed exactly the same acidity before inoculation and after production of the cultures. The abundant cultures were formed in the liquid, as well as on the surface; they exhibited (when developed in a medium containing a considerable proportion of sugar) a rose-cream tint and possessed a peculiar ethereal odor recalling that of certain cheeses. *O. lactis* A. showed no appreciable action on polysaccharides; only an insignificant growth comparable to that obtained with culture media containing no carbohydrates was obtained when carbohydrate nourishment was provided in the form of sucrose, lactose, maltose, dextrin, glycogen, starch, inulin and lichenin. Vegetation in media containing only these carbohydrates ceased after hexose impurities had been consumed; the glucose present in the



preparation of dextrin employed was quickly eliminated in this manner. Arabinose and arabin had no nutritive value. Expts. with MeOH, EtOH, propyl, butyl and fermentation amyl alcs., glycol, glycerol, erythritol, mannitol and dulcitol showed that only EtOH and glycerol had a nutritive value of the same order as glucose. The value of mannitol was very mediocre; no cultures were obtained with the other alcs. employed. The relative weights of the cultures obtained by use of EtOH, glycerol and mannitol were 100, 76 and 2, resp.; the wts. of the cultures obtained with glucose and glycerol were as 100 and 97, resp. No cultures were obtained with MeCHO, while Me<sub>2</sub>CO proved to possess very mediocre nutritive value. Difficulty was encountered in studying the comparative nutritive value of acids owing to the fact that the acidity of the medium retarded development when the free acid was employed, while the destruction of the acid tended to render the medium alkaline when the salt of the acid was used. *O. lactis* A. was grown on 3 different media which consisted of the equivalent amts. of NH<sub>4</sub> tartrate, lactate and acetate dissolved in equal vols. of the solution of inorganic salts mentioned above; the relative wts. of the cultures obtained were 0, 57 and 100, resp. The action of saprophytic *O. lactis* on fatty substances was also studied because of the important role which this organism plays in the ripening of cheese. Fats were readily decomposed and well developed cultures were obtained on egg yolk (handled under aseptic conditions). Analysis of the Et<sub>2</sub>O extract showed the relative amts. of fatty acids before and after (both raw and cooked yolk) development to be approx. 1, 34 and 63, resp.

L23 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:159110 CAPLUS  
DOCUMENT NUMBER: 140:180644  
TITLE: Specially-processed soybean milk containing  
low-molecular-weight SOD-like substances, products  
derived therefrom, and okara-derived fermented foods  
INVENTOR(S): Mitsuyama, Fuyuki  
PATENT ASSIGNEE(S): USA  
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2004057043	A	20040226	JP 2002-217808	20020726
PRIORITY APPLN. INFO.:			JP 2002-217808	20020726

AB The soybean milk, which may be further fermented, is manufactured by heating and squeezing or squeezing and heating soybean slurry, wherein the soybean is roasted at a low temperature to become low-mol.-weight state and/or stabilizers for activity of SOD-like substances, e.g. trehalose, are contained. Also claimed are viscosity-controlled or solidified foods which contain the soybean milk and optionally other food materials, oligosaccharide syrup which is manufactured by concentrating soybean whey after deproteinization of the soybean milk, purified oligosaccharides manufactured from the syrup, and soybean-base foods manufactured by fermenting mixts. containing okara in low-mol.-weight state with low-mol.-weight SOD-like substances and/or SOD-like substance-containing materials. Low-mol.-weight SOD-like substances formed by the low-temperature roasting are effectively uptaken by cells to show physiol. activity. Whole soybean were roasted under far-IR irradiation at 85° for 3 h, macerated, mashed, heated, and squeezed to give soybean milk. A mixture of the soybean milk and trehalose had no offensive taste and green odor and relieved symptoms due to constipation in volunteers.

L23 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1917:4726 CAPLUS  
DOCUMENT NUMBER: 11:4726  
ORIGINAL REFERENCE NO.: 11:971f-i,972a-h  
TITLE: Biology of *Oidium lactis*  
AUTHOR(S): Linossier, G.  
CORPORATE SOURCE: Paris  
SOURCE: Comptes Rendus des Seances de la Societe de Biologie  
et de Ses Filiales (1916), 79, 309-13  
CODEN: CRSBAW; ISSN: 0037-9026  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable

AB This *Oidium lactis* (designated as *O. lactis* A. to distinguish it from the saprophytic *O. lactis*) was isolated from the sputum of a patient with symptoms of pulmonary tuberculosis (no tubercle bacilli were, however, detected); it occurred in the form of false membranes associated with pneumococci. This microorganism was not morphologically distinct from the saprophytic *O. lactis* and the following expts. were undertaken for the purpose of detecting a possible biological distinction: *O. lactis* A. thrived on a medium composed of distilled H<sub>2</sub>O, KH<sub>2</sub>PO<sub>4</sub>, MgSO<sub>4</sub>, CaCl<sub>2</sub>, FeSO<sub>4</sub>, ZnSO<sub>4</sub>, Na<sub>4</sub>SiO<sub>4</sub> in the resp. proportions of 1000, 0.75, 0.50, 0.05, 0.02, 0.02, traces (suitable carbohydrate and nitrogenous constituents were added). Abundant access of air was also favorable to its development; the relative wts. of cultures obtained with thick and thin layers of nutrient liquid (after 10 days at ordinary temperature) were as 100

and 144, resp. The foregoing solution of salts (with the addition of 10 cc. of glycerol per l.) was distributed in vols. of 50 cc. in a series of flasks; amts. of various nitrogeous substances corresponding in all cases to 14 mgs. of N were then added to the flasks after which the contents were sterilized and inoculated with a trace of *O. lactis A.* The following relative wts. of cultures (after washing and drying) were obtained for the resp. N compds. indicated: urea 100, leucine 85, alanine 76,  $\text{NH}_4$  tartrate 73, glycocoll 24,  $(\text{NH}_4)_2\text{SO}_4$  21, peptone 16, gelatin 2.7,  $\text{KNO}_3$  0.7,  $\text{KNO}_2$  0.3, control without N 0.3. Casein had about the same order of value as gelatin. In another experiment the foregoing solution of salts

(with the addition of 1.2 g. urea per l.) was distributed in 100 cc. vols. in a number of flasks; various carbohydrates were then added, the amount in each case being such that a constant weight (0.96 g.) of O would be required for complete oxidation. After sterilization and inoculation the flasks were kept at room temperature. The relative wts. of the cultures (after washing and drying) for the various sugars employed were (after 8 days): dextrose 100, levulose 107, galactose 52. The relatively large wts. of the cultures obtained, when compared with the amount of sugar consumed, indicate that *O. lactis A.* did not (in spite of the presence of a considerable amount of yeast in the cultures) produce alc. fermentation; other considerations indicate that alc., if produced in appreciable amount, would be consumed by the microorganism. Less than 0.5% of alc. was obtained when a raisin must was inoculated with *O. lactis A.* and kept for 3 mos. under the most favorable conditions for the production of alc. fermentation. This organism did not produce appreciable amts. of acid at the expense of sugar; the culture liquids showed exactly the same acidity before inoculation and after production of the cultures. The abundant cultures were formed in the liquid, as well as on the surface; they exhibited (when developed in a medium containing a considerable proportion of sugar) a rose-cream tint and possessed a peculiar ethereal odor recalling that of certain cheeses. *O. lactis A.* showed no appreciable action on polysaccharides; only an insignificant growth comparable to that obtained with culture media containing no carbohydrates was obtained when carbohydrate nourishment was provided in the form of sucrose, lactose, maltose, dextrin, glycogen, starch, inulin and lichenin. Vegetation in media containing only these carbohydrates ceased after hexose impurities had been consumed; the glucose present in the preparation of dextrin employed was quickly eliminated in this manner. Arabinose and arabin had no nutritive value. Expts. with MeOH, EtOH, propyl, butyl and fermentation amyl alcs., glycol, glycerol, erythritol, mannitol and dulcitol showed that only EtOH and glycerol had a nutritive value of the same order as glucose. The value of mannitol was very mediocre; no cultures were obtained with the other alcs. employed. The relative weights of the cultures obtained by use of EtOH, glycerol and mannitol were 100, 76 and 2, resp.; the wts. of the cultures obtained with glucose and glycerol were as 100 and 97, resp. No cultures were obtained with MeCHO, while Me<sub>2</sub>CO proved to possess very mediocre nutritive value. Difficulty was encountered in studying the comparative nutritive value of acids owing to the fact that the acidity of the medium retarded development when the free acid was employed, while the destruction of the acid tended to render the medium alkaline when the salt of the acid was used. *O. lactis A.* was grown on 3 different media which consisted of the equivalent amts. of  $\text{NH}_4$  tartrate, lactate and acetate dissolved in equal vols. of the solution of inorganic salts mentioned above; the relative wts. of the cultures obtained were 0, 57 and 100, resp. The action of saprophytic *O. lactis* on fatty substances was also studied because of the important role which this organism plays in the ripening of cheese. Fats were readily decomposed and well developed cultures were obtained on egg yolk (handled under aseptic conditions). Analysis of the Et<sub>2</sub>O extract showed the relative amts. of fatty acids before and after (both raw and cooked yolk) development to be approx. 1, 34 and 63, resp.

L25 ANSWER 1 OF 1 MEDLINE on STN  
ACCESSION NUMBER: 90034408 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 2509305  
TITLE: Bacterial vaginosis is not a simple ecological disorder.  
AUTHOR: Fredricsson B; Englund K; Weintraub L; Olund A; Nord C E  
CORPORATE SOURCE: Department of Obstetrics and Gynecology, Huddinge  
University Hospital, Sweden.  
SOURCE: Gynecologic and obstetric investigation, (1989) Vol. 28,  
No. 3, pp. 156-60.  
Journal code: 7900587. ISSN: 0378-7346.  
PUB. COUNTRY: Switzerland  
DOCUMENT TYPE: (CLINICAL TRIAL)  
(COMPARATIVE STUDY)  
Journal; Article; (JOURNAL ARTICLE)  
(RANDOMIZED CONTROLLED TRIAL)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 198912  
ENTRY DATE: Entered STN: 28 Mar 1990  
Last Updated on STN: 3 Feb 1997  
Entered Medline: 7 Dec 1989

AB Eighty-four patients with bacterial vaginosis were examined in an open randomized trial, the aim of which was to define clinical results and the microbiological panorama after topical treatment for 1 week with either an acetic acid jelly (A), an estrogen cream (B), a fermented milk product (C) or metronidazole (D). After exclusion because of chlamydia infection (15 cases) or for other reasons, 61 cases remained for complete evaluation 4 weeks after the start of treatment. Clinical cure was obtained in 3 cases out of 17 on regimen A, in 1 out of 16 on regimen B, in 1 of 14 on regimen C, and in 13 out of 14 on regimen D. The patients were conclusively either symptomless or symptomatic when examined on 113 occasions. Statistically significant reduction after treatment resulting in relief of symptoms was observed in the numbers of corynebacteria and anaerobic cocci, whereas lactobacilli increased in numbers. The instillation of high numbers of *Lactobacillus acidophilus* (C) into the vagina cured only 1 patient and did not influence the predominance of lactobacilli in the vagina at the follow-up examination. The difference in microbiological profile of women in symptomatic and asymptomatic conditions becomes still more apparent when the results of the present and previously published studies on the subject by the present group of investigators are combined. The symptomatic woman is significantly more often harboring corynebacteria, *Gardnerella vaginalis*, peptostreptococci, peptococci, eubacteria and *Bacteroides* species. Lactobacilli are significantly reduced in numbers. However, only 51% of our previously symptomatic, but now symptomless women show predominant growth of lactobacilli, which is less than expected for healthy women. (ABSTRACT TRUNCATED AT 250 WORDS)

L27 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:1124653 CAPLUS  
DOCUMENT NUMBER: 142:33047  
TITLE: Use of a saccharide for the treatment of  
symptoms associated with bacterial  
vaginosis  
INVENTOR(S): Hansen, Inge Dorthe  
PATENT ASSIGNEE(S): IDH Holding ApS, Den.  
SOURCE: PCT Int. Appl., 21 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004110461	A1	20041223	WO 2004-DK410	20040611
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
EP 1635847	A1	20060322	EP 2004-736632	20040611
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK			
BR 2004011429	A	20060725	BR 2004-11429	20040611
US 2006154874	A1	20060713	US 2006-560519	20060320
PRIORITY APPLN. INFO.:			DK 2003-885	A 20030613
			WO 2004-DK410	W 20040611

AB The invention discloses the use of a saccharide, e.g. lactose, for the preparation of a medicament for the treatment and/or prophylaxis of one or more symptoms caused by bacterial vaginosis, wherein the medicament comprises at least 20 percent by weight of saccharide, and wherein the medicament is substantially free from bacteria. Furthermore, the invention discloses a method for treating one or more symptoms associated with bacterial vaginosis, as well as a pharmaceutical composition comprising the saccharide.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:554138 CAPLUS  
DOCUMENT NUMBER: 129:297978  
TITLE: Garnerella-associated vaginitis: comparison of three treatment modalities  
AUTHOR(S): Ozmen, Selale; Turhan, Nilgun, O.; Seckin, Neslihan C.  
CORPORATE SOURCE: Turkish Health and Therapy Foundation, Ankara, Turk.  
SOURCE: Turkish Journal of Medical Sciences (1998), 28(2), 171-173  
CODEN: TJMEEA; ISSN: 1300-0144  
PUBLISHER: Scientific and Technical Research Council of Turkey  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB To compare three different treatment protocols for Gardnerella vaginalis with respect to cure rates and secondary vulvovaginal candidiasis. In

this prospective randomized study, initially 2285 patients with symptoms of bacterial vaginosis were evaluated. Three hundred and seven of them in whom *Gardnerella vaginalis* was recovered were eligible for the study. Group I (114 patients) was given oral metronidazole 500mg twice daily for one week; Group II (96 patients) was prescribed oral metronidazole for one week plus a vaginal suppository of lyophilized lactobacilli, estriol and lactose for twelve days. The third group (97 patients) was treated only with the lactobacilli, estriol and lactose suppositories for twelve days. If the patient was relieved of her symptoms and *Gardnerella vaginalis* was not detected micro-biol. at the second visit, it was considered as a cure. The treatment outcomes were compared by Chi-square test and a p value below 0.05 was considered as significant. The cure rate of Group III (55.6%) was significantly lower than the cure rates of Group I (87.7%) and II (92.7%) ( $p=0.0001$ ). Secondary vaginal candidiasis at the completion of the therapy was significantly lower in the second (3.1%) and the third groups (2.1%), while this rate was 12.2% for the first group ( $p=0.003$ ). Metronidazole followed by lactobacilli, estriol and lactate suppositories were found to be the best therapy model with respect to cure and secondary candidiasis rates.

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:1124653 CAPLUS  
 DOCUMENT NUMBER: 142:33047  
 TITLE: Use of a saccharide for the treatment of  
 symptoms associated with bacterial  
 vaginosis  
 INVENTOR(S): Hansen, Inge Dorthe  
 PATENT ASSIGNEE(S): IDH Holding ApS, Den.  
 SOURCE: PCT Int. Appl., 21 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004110461	A1	20041223	WO 2004-DK410	20040611
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
EP 1635847	A1	20060322	EP 2004-736632	20040611
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK			
BR 2004011429	A	20060725	BR 2004-11429	20040611
US 2006154874	A1	20060713	US 2006-560519	20060320
PRIORITY APPLN. INFO.:			DK 2003-885	A 20030613
			WO 2004-DK410	W 20040611

AB The invention discloses the use of a saccharide, e.g. lactose, for the preparation of a medicament for the treatment and/or prophylaxis of one or more symptoms caused by bacterial vaginosis, wherein the medicament comprises at least 20 percent by weight of saccharide, and wherein the medicament is substantially free from bacteria. Furthermore, the invention discloses a method for treating one or more symptoms associated with bacterial vaginosis, as well as a pharmaceutical composition comprising the saccharide.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1992:629360 CAPLUS  
 DOCUMENT NUMBER: 117:229360  
 TITLE: High performance ion exclusion chromatographic  
 characterization of the vaginal organic acids in women  
 with bacterial vaginosis  
 AUTHOR(S): Stanek, Ronald; Gain, Ronald E.; Glover, Douglas D.;  
 Larsen, Bryan  
 CORPORATE SOURCE: Sch. Med., Marshall Univ., Huntington, WV, 25701, USA  
 SOURCE: Biomedical Chromatography (1992), 6(5), 231-5  
 CODEN: BICHE2; ISSN: 0269-3879  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Vaginal organic acids have previously been detected by gas-liquid chromatog., but the authors have applied an ion exclusion high performance liquid chromatog. procedure to the anal. of vaginal discharge samples. This

procedure has the advantage of not requiring derivatization of non-volatile acids and provides the convenience of a technique which does not require the use of flammable gases, while allowing the identification of at least 18 different acids from the same chromatog. anal. Vaginal discharge from women with symptoms of bacterial vaginosis was collected on weighed swabs and analyzed for the presence of organic acids. The results were compared to the organic acid content of samples obtained from the same cohort of women after treatment with metronidazole. In addition, samples were obtained from asymptomatic women and these samples were analyzed in the same manner. The number of organic acids present in samples from women with bacterial vaginosis was greater than the number found after treatment or among asymptomatic women. Succinic acid appeared to be inversely related to lactate concentration and succinate:lactate ratios were greater among women with bacterial vaginosis before treatment than after treatment. Liquid chromatog. has proven useful as a means of evaluating the metabolic end-products of vaginal microorganisms in situ.

L28 ANSWER 3 OF 7 MEDLINE on STN  
 ACCESSION NUMBER: 2002151123 MEDLINE  
 DOCUMENT NUMBER: PubMed ID: 11883217  
 TITLE: [Application of 2% clindamycin cream in the treatment of bacterial vaginosis and valuation of methylcellulose gel containing the complex of Chitosan F and PVP k-90 with lactic acid as carrier for intravaginally adhbited medicines in the cases of pregnancies with the symptoms of preterm delivery].  
 Zastosowanie 2% kremu z klindamycyna w leczeniu bakteryjnej waginozy oraz ocena zelu z metylocelulozy, zawierajacego kompleks Chitiozanu F i PVP K-90 z kwasem mlekowym, jako nosnika dla lekow stosowanych dopochwowo w przypadkach ciezarnych z objawami porodu przedwczesnego zagrazajacego.  
 AUTHOR: Hirnle L; Heimrath J; Woyton J; Klosek A; Hirnle G; Malolepsza-Jarmolowska K  
 CORPORATE SOURCE: Katedry i Kliniki Rozrodczosci AM we Wroclawiu.  
 SOURCE: Ginekologia polska, (2001 Dec) Vol. 72, No. 12, pp. 1096-100.  
 Journal code: 0374641. ISSN: 0017-0011.  
 PUB. COUNTRY: Poland  
 DOCUMENT TYPE: (ENGLISH ABSTRACT)  
 Journal; Article; (JOURNAL ARTICLE)  
 LANGUAGE: Polish  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 200205  
 ENTRY DATE: Entered STN: 11 Mar 2002  
 Last Updated on STN: 5 May 2002  
 Entered Medline: 3 May 2002

AB OBJECTIVES: There are many reports informing about the connection between BV and the increased risk of preterm delivery. The reason of self-concession and reversion of BV after having executed an efficient treatment has not yet been properly explained. DESIGN: The aim of this work was the clinical valuation of the 2% Clindamycin cream in the treatment of BV and of the methylcellulose gel containing the complex of Chitosan F and PVP K-90 with lactic acid as a carrier for intravaginally adhbited medicines in the cases of pregnancies with the symptoms of a preterm delivery. MATERIAL AND METHODS: The research comprised 145 pregnant between 24-34 week of pregnancy, hospitalised because of the symptoms of a preterm menace delivery. In the case of the detection of BV, a 10-day therapy using intravaginal cream containing 2% Clindamycin was executed. In the cases not qualified as BV, the methylcellulose gel containing the complex of



Chitosan F and PVP K-90 with lactic acid has been intravaginally adhibited for 10 days. CONCLUSIONS: 1. Application of 2% Clindamycin cream is an efficient method of the treatment of bacterial vaginosis. 2. Methylcellulose gel containing lactic acid combined with the complex of Chitosan F and PVP K-90 allows a persistent maintenance of the correct pH of vagina. 3. Methylcellulose gel, because of its physico-chemical properties similar to physiological mucus, is a universal carrier for intravaginally adhibited medicines.

L28 ANSWER 4 OF 7 MEDLINE on STN  
ACCESSION NUMBER: 94063882 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 8244360  
TITLE: Effect of lactic acid suppositories compared with oral metronidazole and placebo in bacterial vaginosis: a randomised clinical trial.  
AUTHOR: Boeke A J; Dekker J H; van Eijk J T; Kostense P J; Bezemer P D  
CORPORATE SOURCE: Department of General Practice, Faculty of Medicine, Vrije Universiteit, Amsterdam, Netherlands.  
SOURCE: Genitourinary medicine, (1993 Oct) Vol. 69, No. 5, pp. 388-92.  
Journal code: 8503853. ISSN: 0266-4348.  
PUB. COUNTRY: ENGLAND: United Kingdom  
DOCUMENT TYPE: (CLINICAL TRIAL)  
(COMPARATIVE STUDY)  
Journal; Article; (JOURNAL ARTICLE)  
(RANDOMIZED CONTROLLED TRIAL)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199312  
ENTRY DATE: Entered STN: 1 Feb 1994  
Last Updated on STN: 1 Feb 1994  
Entered Medline: 23 Dec 1993  
AB OBJECTIVE--To compare the effect of lactic acid locally, metronidazole orally and placebo in women with bacterial vaginosis. DESIGN--Randomised clinical trial. SETTING--30 general practices in the Netherlands. PATIENTS--125 women consulting the general practitioner for symptomatic bacterial vaginosis. MAIN OUTCOME MEASURES--Duration of subjective symptoms, recurrence of symptoms, clinically diagnosed cure, adverse events. RESULTS--Survival analysis showed a significantly faster disappearance of symptoms in the metronidazole category compared with both lactic acid and placebo ( $p = 0.0005$  metronidazole v placebo,  $p = 0.0002$  metronidazole v lactic acid  $p = 0.6521$  lactic acid v placebo [The stratified Mantel Cox test]). The median duration until absence of symptoms was 21 days for metronidazole and 80 days for placebo. Disappearance of symptoms did not occur in 50% of the lactic acid group in 90 days. Recurrence rates of symptoms were similar over the treatment categories ( $p = 0.13$  metronidazole v placebo and  $p = 0.12$  lactic acid v placebo). After 2 weeks cure rates (cure defined as less than three of four clinical criteria present) were 83%, 49% and 47% for metronidazole, lactic acid and placebo category respectively. At that time cure rates (cure defined as none of three clinical criteria present) were 10%, 0% and 3%. After four weeks and three months these figures were: 55%, 20%, 20% and 64%, 28%, 28%. No differences in adverse events were found between the three interventions. CONCLUSIONS--Lactic acid suppositories are ineffective, metronidazole capsules are effective on signs and symptoms in bacterial vaginosis. A considerable proportion of the patients recover without active medication.

L28 ANSWER 5 OF 7 MEDLINE on STN  
 ACCESSION NUMBER: 93099364 MEDLINE  
 DOCUMENT NUMBER: PubMed ID: 1463935  
 TITLE: High performance ion exclusion chromatographic  
 characterization of the vaginal organic acids in women with  
 bacterial vaginosis.  
 AUTHOR: Stanek R; Gain R E; Glover D D; Larsen B  
 CORPORATE SOURCE: Department of Obstetrics and Gynecology, Marshall  
 University School of Medicine, Huntington, WV 25701.  
 SOURCE: Biomedical chromatography : BMC, (1992 Sep-Oct) Vol. 6, No.  
 5, pp. 231-5.  
 Journal code: 8610241. ISSN: 0269-3879.  
 PUB. COUNTRY: ENGLAND: United Kingdom  
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
 LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 199301  
 ENTRY DATE: Entered STN: 5 Feb 1993  
 Last Updated on STN: 6 Feb 1998  
 Entered Medline: 15 Jan 1993

AB Vaginal organic acids have previously been detected by gas-liquid  
 chromatography, but we have applied an ion exclusion high performance  
 liquid chromatographic procedure to the analysis of vaginal discharge  
 samples. This procedure has the advantage of not requiring derivitization  
 of non-volatile acids and provides the convenience of a technique which  
 does not require the use of flammable gasses, while allowing the  
 identification of at least 18 different acids from the same  
 chromatographic analysis. Vaginal discharge from women with  
 symptoms of bacterial vaginosis was collected  
 on weighed swabs and analysed for the presence of organic acids. The  
 results were compared to the organic acid content of samples obtained from  
 the same cohort of women after treatment with metronidazole. In addition,  
 samples were obtained from asymptomatic women and these samples were  
 analysed in the same manner. The number of organic acids present in  
 samples from women with bacterial vaginosis was  
 greater than the number found after treatment or among asymptomatic women.  
 Succinic acid appeared to be inversely related to lactate concentration  
 and succinate:lactate ratios were greater among women with  
 bacterial vaginosis before treatment than after  
 treatment. Liquid chromatography has proven useful as a means of  
 evaluating the metabolic end-products of vaginal microorganisms in situ.

L28 ANSWER 6 OF 7 MEDLINE on STN  
 ACCESSION NUMBER: 91060115 MEDLINE  
 DOCUMENT NUMBER: PubMed ID: 2245947  
 TITLE: Bacterial vaginosis and the effect of intermittent  
 prophylactic treatment with an acid lactate gel.  
 AUTHOR: Andersch B; Lindell D; Dahlen I; Brandberg A  
 CORPORATE SOURCE: Department of Obstetrics and Gynecology, Ostra Sjukhuset,  
 Goteborg, Sweden.  
 SOURCE: Gynecologic and obstetric investigation, (1990) Vol. 30,  
 No. 2, pp. 114-9.  
 Journal code: 7900587. ISSN: 0378-7346.  
 PUB. COUNTRY: Switzerland  
 DOCUMENT TYPE: (CLINICAL TRIAL)  
 (CONTROLLED CLINICAL TRIAL)  
 Journal; Article; (JOURNAL ARTICLE)  
 LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 199101  
 ENTRY DATE: Entered STN: 22 Feb 1991  
 Last Updated on STN: 3 Feb 1997  
 Entered Medline: 8 Jan 1991

AB Intermittent treatment with an acid lactate gel (Lactal, ACO, Sweden)

reduced symptoms of bacterial vaginosis (BV) and promoted the reestablishment of the normal vaginal flora of lactobacilli. Forty-two women seriously affected by recurrent BV were initially given acid gel (lactate gel, pH 3.8, 5 ml) to be inserted into the vagina daily for 7 consecutive days. Thereafter they entered into a double blind clinical trial and were treated prophylactically 3 days monthly for 6 months with either lactate gel or a placebo gel. Women treated with the lactate gel were clinically improved, i.e. no signs of BV in 88% compared to 10% in the placebo group (p less than 0.001). The vaginal lactobacilli flora was reestablished in 83% of the lactate group and in 16% of the placebo group. Local intermittent application of lactate gel was found to be free of side effects and is a preferable alternative to repeated treatments with antibiotics in patients with recurrent BV.

L28 ANSWER 7 OF 7 MEDLINE on STN  
 ACCESSION NUMBER: 86137748 MEDLINE  
 DOCUMENT NUMBER: PubMed ID: 3485071  
 TITLE: Treatment of bacterial vaginosis with an acid cream: a comparison between the effect of lactate-gel and metronidazole.  
 AUTHOR: Andersch B; Forssman L; Lincoln K; Torstensson P  
 SOURCE: Gynecologic and obstetric investigation, (1986) Vol. 21, No. 1, pp. 19-25.  
 Journal code: 7900587. ISSN: 0378-7346.  
 PUB. COUNTRY: Switzerland  
 DOCUMENT TYPE: (CLINICAL TRIAL)  
 (COMPARATIVE STUDY)  
 (CONTROLLED CLINICAL TRIAL)  
 Journal; Article; (JOURNAL ARTICLE)  
 LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 198604  
 ENTRY DATE: Entered STN: 21 Mar 1990  
 Last Updated on STN: 3 Feb 1997  
 Entered Medline: 15 Apr 1986

AB Bacteriological isolation of anaerobes, Gardnerella and lactobacilli was carried out in a group of 62 women with the diagnosis bacterial vaginosis and 42 control women. Lactobacilli were the predominant organisms in the control group whereas anaerobes dominated the flora in bacterial vaginosis patients. Lactate-gel (pH 3.5, 5 ml) inserted into the vagina daily for 7 days is as effective as oral metronidazole, 500 mg twice daily for 7 days. The women in both groups became symptom-free and objectively improved. Anaerobes were significantly reduced (p less than 0.0001) in both groups after 1-week treatment but Gardnerella was not significantly reduced. As bacterial vaginosis is generally looked upon as a mild noninflammatory condition lactate-gel seems to be an ideal treatment for this disease.

L4 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1987:530598 CAPLUS  
DOCUMENT NUMBER: 107:130598  
TITLE: Biosynthesis of antibiotic complex 165 by *Streptomyces hygroscopicus* 111-81  
AUTHOR(S): Gesheva, V.; Gesheva, R.; Ivanova, V.; Lyubenova, V.  
CORPORATE SOURCE: Inst. Mikrobiol., Sofia, Bulg.  
SOURCE: Doklady Bolgarskoi Akademii Nauk (1987), 40(7), 91-3  
CODEN: DBANAD; ISSN: 0366-8681  
DOCUMENT TYPE: Journal  
LANGUAGE: Russian

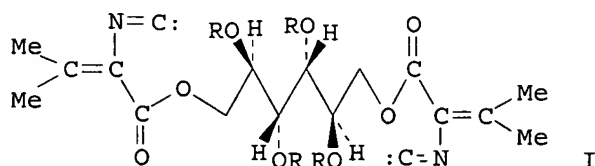
AB Antibiotic complex 165 (I) was produced by *S. hygroscopicus* 111-81 in a synthetic liquid medium containing soybean meal and various C and N substrates. There was no correlation between biomass accumulation and I synthesis. Maximum production of I was observed in a medium containing lactose as a C source and NH<sub>4</sub> succinate as a N source. I is a nonpolyene macrolide which consists of 7 components possessing antibacterial and antifungal activities.

L4 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1977:145915 CAPLUS  
DOCUMENT NUMBER: 86:145915  
ORIGINAL REFERENCE NO.: 86:22844h,22845a  
TITLE: Antibiotic mixture A-32390  
INVENTOR(S): Marconi, Gary G.; Hoehn, Marvin M.; Thakkar, Arvind L.  
PATENT ASSIGNEE(S): Eli Lilly and Co., USA  
SOURCE: Ger. Offen., 38 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2631887	A1	19770120	DE 1976-2631887	19760715
US 4024240	A	19770517	US 1975-597115	19750718
JP 52012986	A	19770131	JP 1976-83434	19760713
FR 2354776	B1	19781222	FR 1976-21656	19760715
FR 2354776	A1	19780113		
PRIORITY APPLN. INFO.:			US 1975-597112	A 19750718
			US 1975-597115	A 19750718

GI



AB Antibiotic A-32390 [61287-92-1] containing Factors A1 [61241-59-6] B, C and D, and Factor A tetra-(C2-4)-acyl esters (I : R = all the same H, acetyl, propionyl, or butyryl) were isolated from aerobic cultures of *Pyrenochaeta* sp. NRRL 5786. Formulations containing antibiotic mixture A-32390, Factor A,

or

Factor A tetraacyl ester and polyvinylpyrrolidone were also prepared. These active agents inhibit dopamine  $\beta$ -hydroxylase [9013-38-1] and show antifungal, antibacterial, and hypotensive activity. *Pyrenochaeta* sp. NRRL 5786 was cultured first on an agar slant and then

L4 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

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DOCUMENT NUMBER: 107:130598  
TITLE: Biosynthesis of antibiotic complex 165 by *Streptomyces hygroscopicus* 111-81  
AUTHOR(S): Gesheva, V.; Gesheva, R.; Ivanova, V.; Lyubenova, V.  
CORPORATE SOURCE: Inst. Mikrobiol., Sofia, Bulg.  
SOURCE: Doklady Bolgarskoi Akademii Nauk (1987), 40(7), 91-3  
CODEN: DBANAD; ISSN: 0366-8681  
DOCUMENT TYPE: Journal  
LANGUAGE: Russian

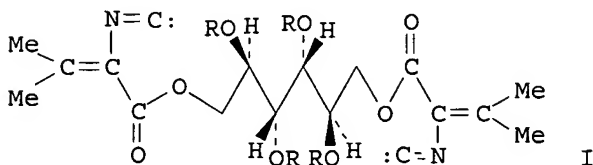
AB Antibiotic complex 165 (I) was produced by *S. hygroscopicus* 111-81 in a synthetic liquid medium containing soybean meal and various C and N substrates. There was no correlation between biomass accumulation and I synthesis. Maximum production of I was observed in a medium containing lactose as a C source and NH<sub>4</sub> succinate as a N source. I is a nonpolyene macrolide which consists of 7 components possessing antibacterial and antifungal activities.

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INVENTOR(S): Marconi, Gary G.; Hoehn, Marvin M.; Thakkar, Arvind L.  
PATENT ASSIGNEE(S): Eli Lilly and Co., USA  
SOURCE: Ger. Offen., 38 pp.  
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DE 2631887	A1	19770120	DE 1976-2631887	19760715
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FR 2354776	A1	19780113		
PRIORITY APPLN. INFO.:			US 1975-597112	A 19750718
			US 1975-597115	A 19750718

GI



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or

Factor A tetraacyl ester and polyvinylpyrrolidone were also prepared. These active agents inhibit dopamine  $\beta$ -hydroxylase [9013-38-1] and show antifungal, antibacterial, and hypotensive activity. *Pyrenochaeta* sp. NRRL 5786 was cultured first on an agar slant and then

successively in liquid vegetative medium, aqueous glycerin-lactose solution, and production medium. The final fermented production medium was filtered and the filtrate was extracted with EtOAc. The extract was then concentrated and cooled to precipitate Antibiotic mixture A-32390. Factor A was separated from the mixture by column chromatog., and was treated with C2-4 alkanolic acid anhydrides to give the corresponding esters. The antibiotic mixture was nontoxic, with s.c. LD<sub>50</sub> >1000 mg/kg in the mouse. Compns. comprising polyvinylpyrrolidone and Factor A showed antifungal activity, and were prepared by dissolving Factor A and the polymer in Me<sub>2</sub>CO and CHCl<sub>3</sub>, resp., and then mixing the 2 solns. to give a 1:1 to 1:9 antibiotic-polymer ratio.

L4 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1976:87879 CAPLUS  
 DOCUMENT NUMBER: 84:87879  
 ORIGINAL REFERENCE NO.: 84:14373a,14376a  
 TITLE: Isoflavone rhamnosides, inhibitors of  
 β-galactosidase produced by Actinomycetes  
 AUTHOR(S): Aoyagi, Takaaki; Hazato, Tadahiko; Kumagai, Michihiko;  
 Hamada, Masa; Takeuchi, Tomio; Umezawa, Hamao  
 CORPORATE SOURCE: Inst. Microb. Chem., Tokyo, Japan  
 SOURCE: Journal of Antibiotics (1975), 28(12), 1006-8  
 CODEN: JANTAJ; ISSN: 0021-8820  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB An inhibitor of β-galactosidase was produced by a Streptomyces species closely related to S. xanthophaeus grown in shake culture on a medium (pH 7.2) containing lactose 2.0, soybean meal 1.5, NaCl 0.3, MgSO<sub>4</sub>·7H<sub>2</sub>O 0.1, K<sub>2</sub>HPO<sub>4</sub> 0.1, CuSO<sub>4</sub>·5H<sub>2</sub>O 0.0007, FeSO<sub>4</sub>·7H<sub>2</sub>O 0.0001, MnCl<sub>2</sub>·4H<sub>2</sub>O 0.0008, and ZnSO<sub>4</sub>·7H<sub>2</sub>O 0.0002%. The isoflavonoids of the culture filtrate were purified by ion exchange and Sephadex LH-20 chromatog. Four inhibitors were obtained but only the major peak from LH-20 chromatog. was further purified by silica gel column chromatog. The structure of the inhibitor was determined as 7-O-rhamnopyranoside-4',7'-dihydroxyisoflavone [58288-35-0]. It inhibited competitively with respect to the substrate and had a KI of 7.1 + 10<sup>-6</sup>M at pH 7. It did not inhibit various sialidases and at a concentration of 100 μg/ml showed no antibacterial or antifungal activities.

L4 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1971:476842 CAPLUS  
 DOCUMENT NUMBER: 75:76842  
 ORIGINAL REFERENCE NO.: 75:12175a,12178a  
 TITLE: Microbical 2-(5-nitro-2-furyl)-4-hydroxythieno[3,2-d]pyrimidines  
 INVENTOR(S): Woitun, Eberhard; Reuter, Wolfgang  
 PATENT ASSIGNEE(S): Thomae, Dr. Karl, G.m.b.H.  
 SOURCE: Ger. Offen., 10 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 1959402	A	19710603	DE 1969-1959402	19691126
PRIORITY APPLN. INFO.:			DE 1969-1959402	19691126

GI For diagram(s), see printed CA Issue.

AB Title compds. (I), useful as antibacterial, antifungal, and antitrichomonal agents, especially against Trichomonas vaginalis, were

successively in liquid vegetative medium, aqueous glycerin-lactose solution, and production medium. The final fermented production medium was filtered and the filtrate was extracted with EtOAc. The extract was then concentrated and cooled to precipitate Antibiotic mixture A-32390. Factor A was separated from the mixture by column chromatog., and was treated with C2-4 alkanolic acid anhydrides to give the corresponding esters. The antibiotic mixture was nontoxic, with s.c. LD<sub>50</sub> >1000 mg/kg in the mouse. Compns. comprising polyvinylpyrrolidone and Factor A showed antifungal activity, and were prepared by dissolving Factor A and the polymer in Me<sub>2</sub>CO and CHCl<sub>3</sub>, resp., and then mixing the 2 solns. to give a 1:1 to 1:9 antibiotic-polymer ratio.

L4 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

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DOCUMENT NUMBER: 84:87879  
ORIGINAL REFERENCE NO.: 84:14373a,14376a  
TITLE: Isoflavone rhamnosides, inhibitors of  
β-galactosidase produced by Actinomycetes  
AUTHOR(S): Aoyagi, Takaaki; Hazato, Tadahiko; Kumagai, Michihiko;  
Hamada, Masa; Takeuchi, Tomio; Umezawa, Hamao  
CORPORATE SOURCE: Inst. Microb. Chem., Tokyo, Japan  
SOURCE: Journal of Antibiotics (1975), 28(12), 1006-8  
CODEN: JANTAJ; ISSN: 0021-8820  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB An inhibitor of β-galactosidase was produced by a Streptomyces species closely related to S. xanthophaeus grown in shake culture on a medium (pH 7.2) containing lactose 2.0, soybean meal 1.5, NaCl 0.3, MgSO<sub>4</sub>·7H<sub>2</sub>O 0.1, K<sub>2</sub>HPO<sub>4</sub> 0.1, CuSO<sub>4</sub>·5H<sub>2</sub>O 0.0007, FeSO<sub>4</sub>·7H<sub>2</sub>O 0.0001, MnCl<sub>2</sub>·4H<sub>2</sub>O 0.0008, and ZnSO<sub>4</sub>·7H<sub>2</sub>O 0.0002%. The isoflavonoids of the culture filtrate were purified by ion exchange and Sephadex LH-20 chromatog. Four inhibitors were obtained but only the major peak from LH-20 chromatog. was further purified by silica gel column chromatog. The structure of the inhibitor was determined as 7-O-rhamnopyranoside-4',7-dihydroxyisoflavone [58288-35-0]. It inhibited competitively with respect to the substrate and had a KI of 7.1 + 10<sup>-6</sup>M at pH 7. It did not inhibit various sialidases and at a concentration of 100 μg/ml showed no antibacterial or antifungal activities.

L4 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

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INVENTOR(S): Wöitun, Eberhard; Reuter, Wolfgang  
PATENT ASSIGNEE(S): Thomae, Dr. Karl, G.m.b.H.  
SOURCE: Ger. Offen., 10 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 1959402	A	19710603	DE 1969-1959402	19691126
PRIORITY APPLN. INFO.:			DE 1969-1959402	19691126

GI For diagram(s), see printed CA Issue.

AB Title compds. (I), useful as antibacterial, antifungal, and antitrichomonal agents, especially against Trichomonas vaginalis, were

prepared by reaction of Et 5-nitro-2-furancarboximidate (II) with Me 3-amino-2-thiophenecarboxylates. Thus, II and Me 3-amino-2-thiophenecarboxylate 1 hr at 130° gave 65% I (R = H) (III). Similarly prepared was I (R = Me). I were used in 50-100 mg doses, e.g. a tablet contained III 100.0, lactose 63.0, starch 50.0, 50.0, poly(vinylpyrrolidinone) 5.0, and Mg stearate 2.0 mg.

L4 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1966:22852 CAPLUS  
DOCUMENT NUMBER: 64:22852  
ORIGINAL REFERENCE NO.: 64:4227b-g  
TITLE: Broad spectrum antibiotic  
INVENTOR(S): Bradler, Gertraud; Thrum, Heinz  
SOURCE: 7 pp.  
DOCUMENT TYPE: Patent  
LANGUAGE: Unavailable  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DD 40135		19650805	DD	19630211
PRIORITY APPLN. INFO.:			DD	19630211

AB *Streptomyces albus* var *metamycinus* isolated from the top sand of the river Vinh Tinh (Viet Nam), is useful in inhibiting gram-pos. and gram-neg. bacteria, mycobacteria, and streptomyces as well as Ehrlich ascites carcinoma cells of mice. It is less effective against yeasts, hyphomycetes, and basidiomycetes. Besides the antibacterial part of the metamycin, an antifungal antibiotic is concentrated in the mycelium from which it is extracted by MeOH. The cultivation of JA 3626 is performed under aerobic conditions. The spores, lyophillically dried on sterilized earth, are inoculated on agar medium and then on nutrient liquid medium. As carbohydrate sources, starch, dextrin, lactose, glucose, or malt extract may be used. As N sources, soybean meal, yeast extract, casein peptone, meat extract or corn-steep water may be employed.

#### Maximum

antibiotic production is obtained in 3-5 days at 24-32°, preferably 28°. For example, a freeze-dried spore on sterile earth is propagated on the following aqueous media: 1.0% glucose, 0.4% casein peptone, 0.4% meat extract, 1 ml. autolyzed yeast or 0.1% yeast extract, 0.25% NaCl, and 2.0% agar-agar. After sterilization the medium has a pH of 6.3. When the starter material is placed in submerged culture the nutrient medium is made up without agar. The liquid nutrient (400 ml.) is sterilized for 30 min. at 120°, cooled, and inoculated with a suspension of spores from a slant culture. The flask is shaken 36-48 hrs. at 27-29° and the contents are then used for the inoculation of liquid media for antibiotic production. The antibiotic nutrient media contains 1.0% glucose, 2.0% potato starch, 0.5% soybean meal, 0.03% corn-steep water calculated on the basis of N content, 0.5% NaCl, 0.3% CaCO<sub>3</sub>, 0.1% yeast extract,

0.1% casein peptone, and 0.2% (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>. After sterilization the pH is 6.2-6.4. The liquid medium (80 ml.) is sterilized 30 min. at 120°, cooled, and inoculated with 2-4% by volume of the starter culture. Maximum antibiotic production is attained in 96-120 hrs. at 28°. The yield was estimated microbiol. in a diffusion culture plate test against *Bacillus subtilis* ATCC 6633. Metamycin can be separated from the culture filtrate by adsorption on solid adsorbents such as activated carbon or cation exchange resin of the carboxyl type and eluted from the adsorbants with aqueous inorg. or organic acids or bases such as NH<sub>3</sub> or Et<sub>3</sub>N. The metamycin is further purified on an ion-exchange chromatograph to a practically ash-free substance. Metamycin is a white amorphous compound with  $[\alpha]_{23D} + 63^\circ$ . It is quite soluble in H<sub>2</sub>O and in MeOH and sparingly soluble in most organic solvents. Metamycin as a base forms salts with acids. Metamycin is comparable with paromomycin. The L.D.50 against mice per kg.



prepared by reaction of Et 5-nitro-2-furancarboximidate (II) with Me 3-amino-2-thiophenecarboxylates. Thus, II and Me 3-amino-2-thiophenecarboxylate 1 hr at 130° gave 65% I (R = H) (III). Similarly prepared was I (R = Me). I were used in 50-100 mg doses, e.g. a tablet contained III 100.0, lactose 63.0, starch 50.0, 50.0, poly(vinylpyrrolidinone) 5.0, and Mg stearate 2.0 mg.

L4 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1966:22852 CAPLUS  
 DOCUMENT NUMBER: 64:22852  
 ORIGINAL REFERENCE NO.: 64:4227b-g  
 TITLE: Broad spectrum antibiotic  
 INVENTOR(S): Bradler, Gertraud; Thrum, Heinz  
 SOURCE: 7 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PRIORITY APPLN. INFO.:			DD	19630211

AB *Streptomyces albus* var *metamycinus* isolated from the top sand of the river Vinh Tinh (Viet Nam), is useful in inhibiting gram-pos. and gram-neg. bacteria, mycobacteria, and streptomyces as well as Ehrlich ascites carcinoma cells of mice. It is less effective against yeasts, hyphomycetes, and basidiomycetes. Besides the antibacterial part of the metamycin, an antifungal antibiotic is concentrated in the mycelium from which it is extracted by MeOH. The cultivation of JA 3626 is performed under aerobic conditions. The spores, lyophillically dried on sterilized earth, are inoculated on agar medium and then on nutrient liquid medium. As carbohydrate sources, starch, dextrin, lactose, glucose, or malt extract may be used. As N sources, soybean meal, yeast extract, casein peptone, meat extract or corn-steep water may be employed.

#### Maximum

antibiotic production is obtained in 3-5 days at 24-32°, preferably 28°. For example, a freeze-dried spore on sterile earth is propagated on the following aqueous media: 1.0% glucose, 0.4% casein peptone, 0.4% meat extract, 1 ml. autolyzed yeast or 0.1% yeast extract, 0.25% NaCl, and 2.0% agar-agar. After sterilization the medium has a pH of 6.3. When the starter material is placed in submerged culture the nutrient medium is made up without agar. The liquid nutrient (400 ml.) is sterilized for 30 min. at 120°, cooled, and inoculated with a suspension of spores from a slant culture. The flask is shaken 36-48 hrs. at 27-29° and the contents are then used for the inoculation of liquid media for antibiotic production. The antibiotic nutrient media contains 1.0% glucose, 2.0% potato starch, 0.5% soybean meal, 0.03% corn-steep water calculated on the basis of N content, 0.5% NaCl, 0.3% CaCO<sub>3</sub>, 0.1% yeast extract,

0.1% casein peptone, and 0.2% (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>. After sterilization the pH is 6.2-6.4. The liquid medium (80 ml.) is sterilized 30 min. at 120°, cooled, and inoculated with 2-4% by volume of the starter culture. Maximum antibiotic production is attained in 96-120 hrs. at 28°. The yield was estimated microbiol. in a diffusion culture plate test against *Bacillus subtilis* ATCC 6633. Metamycin can be separated from the culture filtrate by adsorption on solid adsorbents such as activated carbon or cation exchange resin of the carboxyl type and eluted from the adsorbants with aqueous inorg. or organic acids or bases such as NH<sub>3</sub> or Et<sub>3</sub>N. The metamycin is further purified on an ion-exchange chromatograph to a practically ash-free substance. Metamycin is a white amorphous compound with  $[\alpha]_{23D} + 63^\circ$ . It is quite soluble in H<sub>2</sub>O and in MeOH and sparingly soluble in most organic solvents. Metamycin as a base forms salts with acids. Metamycin is comparable with paromomycin. The L.D.<sub>50</sub> against mice per kg.

of weight for intravenous and intraperitoneal injections and orally are 129, 541, and >2500 mg., resp.

L4 ANSWER 10 OF 10 MEDLINE on STN  
ACCESSION NUMBER: 2005523316 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 16168965  
TITLE: Radioligand binding studies of caloporoside and novel congeners with contrasting effects upon [35S] TBPS binding to the mammalian GABA(A) receptor.  
AUTHOR: Abuhamdah S; Furstner A; Lees G; Chazot P L  
CORPORATE SOURCE: School of Biological and Biomedical Sciences, Science Park, South Road, Durham University, Durham DH1 3LE, UK.  
SOURCE: Biochemical pharmacology, (2005 Nov 1) Vol. 70, No. 9, pp. 1382-8.  
Journal code: 0101032. ISSN: 0006-2952.  
PUB. COUNTRY: England: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200511  
ENTRY DATE: Entered STN: 4 Oct 2005  
Last Updated on STN: 15 Dec 2005  
Entered Medline: 30 Nov 2005

AB Caloporoside is a natural active fungal metabolite, which was isolated from Caloporous dichrous and was described to exhibit antibacterial, antifungal and phospholipase C inhibitory activity. We have previously reported evidence that related beta-linked compounds, lactose and octyl-beta-d-mannoside, bind and functionally modulate rodent GABA(A) receptors, respectively. We have characterized the binding pharmacology of synthetic caloporoside and two further congeners, 2-hydroxy-6-([(16R)-(beta-d-mannopyranosyloxy)heptadecyl]) benzoic acid and octyl-beta-d-glucoside on GABA(A) receptors using a [35S]-t-butylbicyclophosphorothionate (TBPS) radioligand binding assay. Caloporoside and 2-hydroxy-6-([(16R)-(beta-d-mannopyranosyloxy)heptadecyl]) benzoic acid produced concentration-dependent complete inhibition of specific [35S] TBPS binding with overall apparent IC50 values of 14.7+/-0.1 and 14.2+/-0.1 microM, respectively. In contrast, octyl-beta-d-glucoside elicited a concentration-dependent stimulation of specific [35S] TBPS binding (E(max)=144+/-4%; EC50=39.2+/-22.7 nM). The level of stimulation was similar to that elicited by diazepam (E(max)=147+/-6%; EC50=0.8+/-0.1 nM), and was occluded by GABA (0.3 microM). However, the three test compounds failed to elicit any significant effect (positive or negative) upon [3H] flunitrazepam or [3H] muscimol binding, indicating that they did not bind directly, or allosterically couple, to the benzodiazepine or agonist binding site of the GABA(A) receptor, respectively. The constituent monosaccharide, glucose, and both the closely related congeners octyl-beta-d-glucoside or hexyl-beta-d-glucoside have no significant effect upon [35S] TBPS binding. These data, together, provide strong evidence that a beta-glycosidic linkage and chain length are crucial for the positive modulation of [35S] TBPS binding to the GABA(A) receptor by this novel chemical class.

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L4 ANSWER 10 OF 10 MEDLINE on STN  
ACCESSION NUMBER: 2005523316 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 16168965  
TITLE: Radioligand binding studies of caloporoside and novel congeners with contrasting effects upon [35S] TBPS binding to the mammalian GABA(A) receptor.  
AUTHOR: Abuhamdah S; Furstner A; Lees G; Chazot P L  
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SOURCE: Biochemical pharmacology, (2005 Nov 1) Vol. 70, No. 9, pp. 1382-8.  
Journal code: 0101032. ISSN: 0006-2952.  
PUB. COUNTRY: England: United Kingdom  
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ENTRY MONTH: 200511  
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L4 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1060184 CAPLUS  
DOCUMENT NUMBER: 143:398891  
TITLE: Radioligand binding studies of caloporoside and novel congeners with contrasting effects upon [35S] TBPS binding to the mammalian GABAA receptor  
AUTHOR(S): Abuhamdah, S.; Fuerstner, A.; Lees, G.; Chazot, P. L.  
CORPORATE SOURCE: School of Biological and Biomedical Sciences, Durham University, Durham, DH1 3LE, UK  
SOURCE: Biochemical Pharmacology (2005), 70(9), 1382-1388  
CODEN: BCPCA6; ISSN: 0006-2952  
PUBLISHER: Elsevier B.V.  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Caloporoside is a natural active fungal metabolite, which was isolated from Caloporous dichrous and was described to exhibit antibacterial, antifungal and phospholipase C inhibitory activity. We have previously reported evidence that related  $\beta$ -linked compds., lactose and octyl- $\beta$ -D-mannoside, bind and functionally modulate rodent GABAA receptors, resp. We have characterized the binding pharmacol. of synthetic caloporoside and two further congeners, 2-hydroxy-6- $\{[(16R)-(\beta\text{-mannopyranosyloxy})\text{heptadecyl}]\}$  benzoic acid and octyl- $\beta$ -D-glucoside on GABAA receptors using a [35S]-t-butylbicyclophosphorothionate (TBPS) radioligand binding assay. Caloporoside and 2-hydroxy-6- $\{[(16R)-(\beta\text{-D-mannopyranosyloxy})\text{heptadecyl}]\}$  benzoic acid produced concentration-dependent complete inhibition of specific [35S] TBPS binding with overall apparent IC50 values of  $14.7 \pm 0.1$  and  $14.2 \pm 0.1$   $\mu\text{M}$ , resp. In contrast, octyl- $\beta$ -D-glucoside elicited a concentration-dependent stimulation of specific [35S] TBPS binding ( $E_{\text{max}} = 144 \pm 4\%$ ;  $EC_{50} = 39.2 \pm 22.7$  nM). The level of stimulation was similar to that elicited by diazepam ( $E_{\text{max}} = 147 \pm 6\%$ ;  $EC_{50} = 0.8 \pm 0.1$  nM), and was occluded by GABA (0.3  $\mu\text{M}$ ). However, the three test compds. failed to elicit any significant effect (pos. or neg.) upon [3H] flunitrazepam or [3H] muscimol binding, indicating that they did not bind directly, or allosterically couple, to the benzodiazepine or agonist binding site of the GABAA receptor, resp. The constituent monosaccharide, glucose, and both the closely related congeners octyl- $\beta$ -D-glucoside or hexyl- $\beta$ -D-glucoside have no significant effect upon [35S] TBPS binding. These data, together, provide strong evidence that a  $\beta$ -glycosidic linkage and chain length are crucial for the pos. modulation of [35S] TBPS binding to the GABAA receptor by this novel chemical class.

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:180963 CAPLUS  
DOCUMENT NUMBER: 126:176878  
TITLE: Antibacterial and antifungal peptides separated from Podisus  
INVENTOR(S): Bulet, Philippe; Hoffman, Jules; Fehlbaum, Pascale; Hetru, Charles; Tchernych, Serguey  
PATENT ASSIGNEE(S): Rhone Poulenc Agrochimie, Fr.  
SOURCE: Fr. Demande, 20 pp.  
CODEN: FRXXBL  
DOCUMENT TYPE: Patent  
LANGUAGE: French  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2733237	A1	19961025	FR 1995-5094	19950424

FR 2733237

B1 19970516

PRIORITY APPLN. INFO.:

FR 1995-5094

19950424

AB Antibacterial and antifungal peptide (I)

a-Ile-Ile-Tyr-Cys-Asn-Arg-Arg-Thr-Gly-Lys-Cys-b (a = 0-10 amino acids, b = 0-5 amino acids) separated from *Podisus* are useful for the treatment of plants, animals and humans. *Podisus maculiventris* hemolymph was centrifuged and the supernatant was washed with an acidic aqueous solution,

then

treated with acetonitrile in water and was fractionated on HPLC to obtain I (a= Gly-Ser-Lys-Lys-Pro-Val-Pro, b = Gln-Arg-Met) (II).

Antibacterial and antifungal activity of II against many microorganisms and fungi was shown. A tablet contained II 50, starch 60, lactose 50, and magnesium stearate 2 mg.

L4 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1990:422214 CAPLUS

DOCUMENT NUMBER: 113:22214

TITLE: BU-3420T antitumor antibiotic

INVENTOR(S): Ohkuma, Hiroaki; Konishi, Masataka; Matsumoto, Kiyoshi; Oki, Toshikazu; Hoshino, Yutaka

PATENT ASSIGNEE(S): Bristol-Myers Co., USA

SOURCE: Eur. Pat. Appl., 32 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

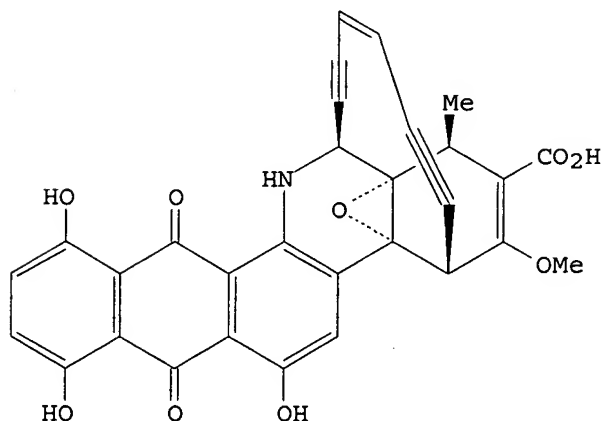
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 350623	A2	19900117	EP 1989-110487	19890609
EP 350623	A3	19910703		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 4916065	A	19900410	US 1988-208330	19880610
FI 8902788	A	19891211	FI 1989-2788	19890607
NO 8902328	A	19891211	NO 1989-2328	19890607
DK 8902834	A	19891211	DK 1989-2834	19890609
JP 02117676	A	19900502	JP 1989-148201	19890609
ZA 8904393	A	19900926	ZA 1989-4393	19890609
HU 202591	B	19910328	HU 1989-3026	19890609
HU 57774	A2	19911230	HU 1990-1778	19890609
HU 205932	B	19920728		
AU 8936338	A	19891221	AU 1989-36338	19890613
AU 633826	B2	19930211		
US 4952572	A	19900828	US 1989-434756	19891113
PRIORITY APPLN. INFO.:			US 1988-208330	A 19880610

GI



I

AB A new antibiotic designated BU-3420T (I) was produced by fermentation of *Micromonospora chersina* in a medium containing 1% lactose, 3% dextrin, 1% fish meal, and salts, pH 7.0, for 7 days with shaking. I was isolated from the culture filtrate by extraction with BuOH followed by column chromatog. on Sephadex LH-20. The structure of I was established by UV and <sup>1</sup>H-NMR spectroscopy. I and its triacetate derivative possess antibacterial and antifungal activity and also inhibit the growth of mammalian tumors such as P388 leukemia in mice.

L4 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:420005 CAPLUS

DOCUMENT NUMBER: 109:20005

TITLE: Biosynthesis of the antibiotic complex 165 by a culture of *Streptomyces hygroscopicus* 111-81

AUTHOR(S): Gesheva, V.; Gesheva, R.; Ivanova, V. B.; Lyubenova, V. G.

CORPORATE SOURCE: Inst. Mikrobiol., Sofia, 1113, Bulg.

SOURCE: Doklady Bolgarskoi Akademii Nauk (1987), 40(7), 91-3  
CODEN: DBANAD; ISSN: 0366-8681

DOCUMENT TYPE: Journal

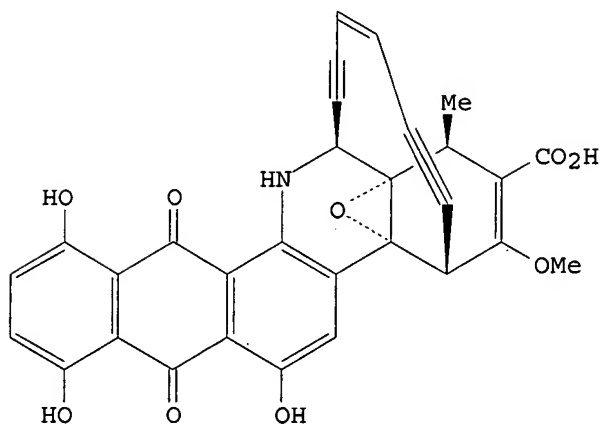
LANGUAGE: Russian

AB Antibiotic complex 165 was produced by *S. hygroscopicus* in a semisynthetic medium. The organism utilized various C and N sources, but there was no correlation between growth rate and antibiotic synthesis. However, with some C substrates a neg. correlation was found between growth and antibiotic production. The highest yield of antibiotic was observed in a medium containing soybean meal, lactose, and NH<sub>4</sub> succinate. The antibiotic is a macrolide nonpolyene complex of 7 components, with antibacterial and antifungal activities.

L5 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1990:422214 CAPLUS  
DOCUMENT NUMBER: 113:22214  
TITLE: BU-3420T antitumor antibiotic  
INVENTOR(S): Ohkuma, Hiroaki; Konishi, Masataka; Matsumoto, Kiyoshi; Oki, Toshikazu; Hoshino, Yutaka  
PATENT ASSIGNEE(S): Bristol-Myers Co., USA  
SOURCE: Eur. Pat. Appl., 32 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 350623	A2	19900117	EP 1989-110487	19890609
EP 350623	A3	19910703		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 4916065	A	19900410	US 1988-208330	19880610
FI 8902788	A	19891211	FI 1989-2788	19890607
NO 8902328	A	19891211	NO 1989-2328	19890607
DK 8902834	A	19891211	DK 1989-2834	19890609
JP 02117676	A	19900502	JP 1989-148201	19890609
ZA 8904393	A	19900926	ZA 1989-4393	19890609
HU 202591	B	19910328	HU 1989-3026	19890609
HU 57774	A2	19911230	HU 1990-1778	19890609
HU 205932	B	19920728		
AU 8936338	A	19891221	AU 1989-36338	19890613
AU 633826	B2	19930211		
US 4952572	A	19900828	US 1989-434756	19891113
PRIORITY APPLN. INFO.:			US 1988-208330	A 19880610
GI				



I

AB A new antibiotic designated BU-3420T (I) was produced by fermentation of *Micromonospora chersina* in a medium containing 1% lactose, 3% dextrin, 1% fish meal, and salts, pH 7.0, for 7 days with shaking. I was isolated from the culture filtrate by extraction with BuOH followed by column chromatog. on Sephadex LH-20. The structure of I was established by UV and <sup>1</sup>H-NMR spectroscopy. I and its triacetate derivative possess antibacterial and antifungal activity and also inhibit the growth of mammalian tumors such as P388 leukemia in mice.

L5 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1976:87879 CAPLUS  
DOCUMENT NUMBER: 84:87879  
ORIGINAL REFERENCE NO.: 84:14373a,14376a  
TITLE: Isoflavone rhamnosides, inhibitors of  
 $\beta$ -galactosidase produced by Actinomycetes  
AUTHOR(S): Aoyagi, Takaaki; Hazato, Tadahiko; Kumagai, Michihiko;  
Hamada, Masa; Takeuchi, Tomio; Umezawa, Hamao  
CORPORATE SOURCE: Inst. Microb. Chem., Tokyo, Japan  
SOURCE: Journal of Antibiotics (1975), 28(12), 1006-8  
CODEN: JANTAJ; ISSN: 0021-8820  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB An inhibitor of  $\beta$ -galactosidase was produced by a Streptomyces species closely related to S. xanthophaeus grown in shake culture on a medium (pH 7.2) containing lactose 2.0, soybean meal 1.5, NaCl 0.3, MgSO<sub>4</sub>.7H<sub>2</sub>O 0.1, K<sub>2</sub>HPO<sub>4</sub> 0.1, CuSO<sub>4</sub>.5H<sub>2</sub>O 0.0007, FeSO<sub>4</sub>.7H<sub>2</sub>O 0.0001, MnCl<sub>2</sub>.4H<sub>2</sub>O 0.0008, and ZnSO<sub>4</sub>.7H<sub>2</sub>O 0.0002%. The isoflavonoids of the culture filtrate were purified by ion exchange and Sephadex LH-20 chromatog. Four inhibitors were obtained but only the major peak from LH-20 chromatog. was further purified by silica gel column chromatog. The structure of the inhibitor was determined as 7-O-rhamnopyranoside-4',7-dihydroxyisoflavone [58288-35-0]. It inhibited competitively with respect to the substrate and had a KI of 7.1 + 10<sup>-6</sup>M at pH 7. It did not inhibit various sialidases and at a concentration of 100  $\mu$ g/ml showed no antibacterial or antifungal activities.

L5 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1966:22852 CAPLUS  
DOCUMENT NUMBER: 64:22852  
ORIGINAL REFERENCE NO.: 64:4227b-g  
TITLE: Broad spectrum antibiotic  
INVENTOR(S): Bradler, Gertraud; Thrum, Heinz  
SOURCE: 7 pp.  
DOCUMENT TYPE: Patent  
LANGUAGE: Unavailable  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DD 40135		19650805	DD	19630211
PRIORITY APPLN. INFO.:			DD	19630211

AB Streptomyces albus var metamycinus isolated from the top sand of the river Vinh Tinh (Viet Nam), is useful in inhibiting gram-pos. and gram-neg. bacteria, mycobacteria, and streptomyces as well as Ehrlich ascites carcinoma cells of mice. It is less effective against yeasts, hyphomycetes, and basidiomycetes. Besides the antibacterial part of the metamycin, an antifungal antibiotic is concentrated in the mycelium from which it is extracted by MeOH. The cultivation of JA 3626 is performed under aerobic conditions. The spores, lyophillically dried on sterilized earth, are inoculated on agar medium and then on nutrient liquid medium. As carbohydrate sources, starch, dextrin, lactose, glucose, or malt extract may be used. As N sources, soybean meal, yeast extract, casein peptone, meat extract or corn-steep water may be employed.

Maximum

antibiotic production is obtained in 3-5 days at 24-32°, preferably 28°. For example, a freeze-dried spore on sterile earth is propagated on the following aqueous media: 1.0% glucose, 0.4% casein peptone, 0.4% meat extract, 1 ml. autolyzed yeast or 0.1% yeast extract, 0.25% NaCl, and 2.0% agar-agar. After sterilization the medium has a pH of 6.3. When the starter material is placed in submerged culture the nutrient medium is made up without agar. The liquid nutrient (400 ml.) is



sterilized for 30 min. at 120°, cooled, and inoculated with a suspension of spores from a slant culture. The flask is shaken 36-48 hrs. at 27-29° and the contents are then used for the inoculation of liquid media for antibiotic production. The antibiotic nutrient media contains 1.0% glucose, 2.0% potato starch, 0.5% soybean meal, 0.03% corn-steep water calculated on the basis of N content, 0.5% NaCl, 0.3% CaCO<sub>3</sub>, 0.1% yeast extract, 0.1% casein peptone, and 0.2% (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>. After sterilization the pH is 6.2-6.4. The liquid medium (80 ml.) is sterilized 30 min. at 120°, cooled, and inoculated with 2-4% by volume of the starter culture. Maximum antibiotic production is attained in 96-120 hrs. at 28°. The yield was estimated microbiol. in a diffusion culture plate test against *Bacillus subtilis* ATCC 6633. Metamycin can be separated from the culture filtrate by adsorption on solid adsorbents such as activated carbon or cation exchange resin of the carboxyl type and eluted from the adsorbants with aqueous inorg. or organic acids or bases such as NH<sub>3</sub>

or

Et<sub>3</sub>N. The metamycin is further purified on an ion-exchange chromatograph to a practically ash-free substance. Metamycin is a white amorphous compound with  $[\alpha]_{23D} + 63^\circ$ . It is quite soluble in H<sub>2</sub>O and in MeOH and sparingly soluble in most organic solvents. Metamycin as a base forms salts with acids. Metamycin is comparable with paromomycin. The L.D.<sub>50</sub> against mice per kg. of weight for intravenous and intraperitoneal injections and orally are 129, 541, and >2500 mg., resp.

=> d his

(FILE 'HOME' ENTERED AT 14:58:58 ON 02 JAN 2008)

FILE 'CAPLUS, MEDLINE' ENTERED AT 15:04:22 ON 02 JAN 2008

L1 0 S LACTOSE (P) FERMENT? (P) ?VAGINIT?  
L2 1 S LACTOSE (P) FERMENT? (P) ?VAGINOSIS?  
L3 0 S LACTOSE (P) FERMENT? (P) ?VULVA?  
L4 0 S ?SACCHARIDE? (P) FERMENT? (P) ?VULVA?  
L5 1 S ?SACCHARIDE? (P) FERMENT? (P) BACTERIAL VAGINOSIS  
L6 1 S ?SACCHARIDE? (P) FERMENT? (P) VAGINITIS?  
L7 15 S ?SACCHARIDE? (P) BACTERIAL VAGINOSIS  
L8 1 S L7 AND ?LACTOSE?  
L9 14 S L7 NOT L8  
L10 0 S L9 AND ?ODOUR?  
L11 0 S L9 AND ?ODOR?  
L12 0 S L9 AND PURITUS?  
L13 0 S L9 AND LACTIC ACID?  
L14 14 S L9 AND ?BACTERIA?  
L15 4 S LACTOSE? (P) GARDNERELLA VAGINAL?  
L16 1 S L15 AND BACTERIAL VAGINOSIS  
L17 0 S L16 AND LACTIC ACID?  
L18 6 S LACTOSE? (P) LACTIC ACID BACTERI? (P) FERMENT? (P) SYMPTOM?  
L19 0 S LACTOSE? (P) ODOUR? (P) FERMENT? (P) SYMPTOM?  
L20 0 S LACTOSE? (P) ODOUR? (P) VAGIN? (P) SYMPTOM?  
L21 0 S LACTOSE? (P) ODOR? (P) VAGIN? (P) SYMPTOM?  
L22 1 S LACTOSE? (P) ODOR? (P) FERMENT? (P) SYMPTOM?  
L23 2 S ?SACCHARIDE? (P) ODOR? (P) FERMENT? (P) SYMPTOM?  
L24 0 S ?SACCHARIDE? (P) ODOUR? (P) FERMENT? (P) SYMPTOM?  
L25 1 S ?BACTERIAL VAGINOSIS? (P) FERMENT? (P) SYMPTOM?  
L26 379 S ?BACTERIAL VAGINOSIS? (P) SYMPTOM?  
L27 2 S L26 AND ?LACTOSE?  
L28 7 S L26 AND ?LACTIC ACID?

=> d his

(FILE 'HOME' ENTERED AT 15:08:24 ON 03 JAN 2008)

FILE 'CAPLUS, MEDLINE' ENTERED AT 15:08:40 ON 03 JAN 2008

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L2	0	S	LACTOSE	(P)	ANTIBACTERIAL?	(P)	ANTIFUNGAL?	(P)	%	
L3	0	S	LACTOSE	(P)	ANTIBACTERIAL?	(P)	%			
L4	10	S	LACTOSE	(P)	ANTIBACTERIAL?	(P)	ANTIFUNGAL?			
L5	3	S	L4	AND	PH					